

# ASsembler!

## Core

## 4.0

Including

## Mech ASsembler!



Compatible with an Action! Packed product or the Action! System™ Core Rules, published by Gold Rush Games™ 'Action! System', 'Action! Packed' and the Action! System and Action! Packed logos are trademarks of Gold Rush Games and are used with permission.

Action! System copyright 2001-2004 by Gold Rush Games. All rights reserved.

This product contains derivative material based on the Action! System Core Rules (A!SCR) released under the Open Game License.

This product is not endorsed by Gold Rush Games.

Action! System and the Action! System logo are trademarks of Gold Rush Games and are used under license in accordance with the terms of the Action! System Trademark License, available at [www.action-system.com](http://www.action-system.com).

Action! System rules created by Mark Arsenault & Patrick Sweeney

Action! System Core Rules written by Mark Arsenault, Patrick Sweeney & Ross Winn

ASsembler Core compiled and modified by Jamie Borg

Current Version: Sunday, December 30, 2007 03:55 PM

### Printing Recommendation

Use the "Fit 2 Pages - Landscape" feature of either the printer driver or PDF Reader Software.

Written using [OpenOffice.org](http://OpenOffice.org)

# Table of Contents

<b>Introduction.....</b>	<b>3</b>	<i>Dramatic or Heroic Actions.....</i>	<i>76</i>	<i>The Elements.....</i>	<i>116</i>
DOCUMENT KEY.....	3	<i>After the Dice Are Rolled.....</i>	<i>76</i>	<b>MechASsemble! Rules.....</b>	<b>116</b>
<b>The Basics.....</b>	<b>3</b>	WHAT ACTION POINTS DO.....	77	MECHA DESIGN.....	116
<b>Attributes.....</b>	<b>6</b>	GAINING ACTION POINTS.....	78	DESIGN COST.....	117
BODY GROUP.....	6	<i>When to Award an Action Point.....</i>	<i>78</i>	<i>Mecha Points.....</i>	<i>117</i>
<i>Strength (STR).....</i>	<i>6</i>	NPC ACTION POINTS.....	79	<i>Design Check-list.....</i>	<i>118</i>
<i>Reflexes (REF).....</i>	<i>6</i>	<b>Experience Points.....</b>	<b>79</b>	STEP 1: MECHA CONCEPT AND TYPE.....	118
<i>Health (HLT).....</i>	<i>6</i>	<b>Rules Of Play.....</b>	<b>81</b>	<i>Concept.....</i>	<i>118</i>
MIND GROUP.....	6	TAKING ACTIONS.....	81	<i>Mecha Types.....</i>	<i>119</i>
<i>Presence (PRE).....</i>	<i>6</i>	<i>What Can I Do?.....</i>	<i>81</i>	STEP 2: MECHA SIZE.....	120
<i>Intellect (INT).....</i>	<i>6</i>	<i>Declaring Actions.....</i>	<i>82</i>	STEP 3: MECHA ATTRIBUTES.....	120
<i>Willpower (WIL).....</i>	<i>6</i>	AVAILABLE ACTIONS.....	82	<i>Mecha Group.....</i>	<i>121</i>
ATTRIBUTE SCORES.....	6	<i>Defensive Actions.....</i>	<i>82</i>	STEP 4: MOVEMENT TYPES.....	123
BUYING ATTRIBUTES.....	7	<i>Movement Actions.....</i>	<i>84</i>	<i>Mecha Movement.....</i>	<i>123</i>
<i>Maximum Attribute Scores.....</i>	<i>7</i>	<i>Full and Half Actions.....</i>	<i>85</i>	<i>Mecha Suit Movement.....</i>	<i>125</i>
<i>Unspent Attribute Points.....</i>	<i>7</i>	<i>Offensive Actions.....</i>	<i>85</i>	<i>Space Movement.....</i>	<i>125</i>
DERIVED ATTRIBUTES.....	7	<i>Special Actions.....</i>	<i>86</i>	<i>Faster than Light Movement.....</i>	<i>126</i>
<i>Defensive Target Number (DEF).....</i>	<i>7</i>	<i>Roll Modifiers.....</i>	<i>87</i>	STEP 5: OCCUPANTS AND CARGO.....	127
<i>Initiative (INI).....</i>	<i>7</i>	COMBAT.....	88	STEP 6: MECHA MODULES.....	127
<i>Toughness (TGH).....</i>	<i>8</i>	<i>Modifying Target Numbers.....</i>	<i>88</i>	<i>Mecha Modules: Design.....</i>	<i>128</i>
<i>Life (LIF).....</i>	<i>8</i>	<i>Combat Modifiers.....</i>	<i>88</i>	<i>Mecha Modules: Exotic.....</i>	<i>139</i>
<i>Society (SOC).....</i>	<i>8</i>	ACTION MODIFIERS.....	90	STEP 7: MECHA DEFECTS.....	149
CHARACTER POINTS.....	9	<i>Autofire.....</i>	<i>91</i>	STEP 8: WEAPONS SYSTEMS DESIGN.....	153
<b>Skills.....</b>	<b>10</b>	<i>Explosions.....</i>	<i>92</i>	<i>Multiple Weapons on a Mecha.....</i>	<i>155</i>
SKILL GROUPS.....	10	<i>Knockback.....</i>	<i>93</i>	<i>Qualities and Restrictions.....</i>	<i>158</i>
<i>Why Skill Groups?.....</i>	<i>10</i>	<i>Throwing Heavy Objects.....</i>	<i>93</i>	STEP 9: MECHA SKILL REQUIREMENTS.....	165
<i>Skill Group Scores.....</i>	<i>10</i>	DAMAGE.....	93	CHARACTERS AND THEIR MECHA.....	165
SKILL LEVELS.....	10	<i>Types of Damage.....</i>	<i>93</i>	<i>Mecha Operation.....</i>	<i>166</i>
<i>Specialities.....</i>	<i>10</i>	<i>Forms of Damage.....</i>	<i>94</i>	THE FINISHING TOUCHES.....	168
<i>Types.....</i>	<i>11</i>	<i>Applying Strength (STR).....</i>	<i>94</i>	<b>Mecha Combat Section.....</b>	<b>169</b>
BUYING SKILLS.....	11	<i>Wounds and Effects of Damage.....</i>	<i>94</i>	<i>Actions Summary.....</i>	<i>173</i>
USING SKILLS.....	12	<i>Recording Damage.....</i>	<i>95</i>	<i>Combat Modifiers.....</i>	<i>174</i>
<i>When to Roll.....</i>	<i>12</i>	<i>Healing.....</i>	<i>96</i>	<i>Hit Locations.....</i>	<i>178</i>
<i>Difficulty Levels.....</i>	<i>12</i>	WEAPONS.....	97	<i>Guided Missile Combat.....</i>	<i>178</i>
<i>Which Attribute to Use?.....</i>	<i>14</i>	<i>Weapon Attributes.....</i>	<i>97</i>	MECHA DAMAGE.....	180
<i>Making the Roll.....</i>	<i>15</i>	<i>Sample Weapon Lists.....</i>	<i>99</i>	<i>Recording Damage.....</i>	<i>182</i>
<i>Effect Numbers.....</i>	<i>15</i>	ARMOUR.....	101	<i>Mecha Repair.....</i>	<i>182</i>
<i>Contested Skill Rolls.....</i>	<i>15</i>	<i>Armour Attributes.....</i>	<i>101</i>	<i>Disabled Mecha.....</i>	<i>183</i>
WHICH SKILLS TO USE?.....	15	<i>Armour List.....</i>	<i>101</i>	<i>Destroying Mecha.....</i>	<i>184</i>
<i>Generic Skill Group List.....</i>	<i>15</i>	INANIMATE OBJECTS.....	102	MECHA COMBAT MANOEUVRING.....	184
SKILL DESCRIPTIONS.....	18	<i>Realistic Values.....</i>	<i>102</i>	<i>Ground Vehicles.....</i>	<i>186</i>
OCCUPATION TEMPLATES (OPTIONAL).....	40	<i>Cinematic/Extreme Values.....</i>	<i>102</i>	<i>Air Vehicles.....</i>	<i>188</i>
<i>Example Templates.....</i>	<i>40</i>	THE ENVIRONMENT AND CONDITIONS.....	105	<i>Water Vehicles.....</i>	<i>188</i>
<b>Traits.....</b>	<b>42</b>	<i>Acid Effects.....</i>	<i>105</i>	<i>Aero-Space Manoeuvres.....</i>	<i>191</i>
COMPLICATIONS.....	43	<i>Asphyxiation and Drowning.....</i>	<i>105</i>	<i>Mechamorphosis Manoeuvres.....</i>	<i>192</i>
<i>General Complications.....</i>	<i>44</i>	<i>Attribute Score Loss.....</i>	<i>106</i>	<i>Chase Manoeuvres.....</i>	<i>193</i>
<i>Restricted Complications.....</i>	<i>53</i>	<i>Cold Dangers.....</i>	<i>106</i>	<i>MechASsemble and the Hex Map.....</i>	<i>199</i>
BENEFITS.....	59	<i>Darkness.....</i>	<i>106</i>	<b>Appendix A: Mecha In Campaigns.....</b>	<b>202</b>
<i>Social Benefits.....</i>	<i>59</i>	<i>Disease.....</i>	<i>107</i>	<b>Appendix B: Mecha Attributes.....</b>	<b>205</b>
<i>Physical Benefits.....</i>	<i>66</i>	<i>Electricity.....</i>	<i>108</i>	<b>Appendix C: Terrain.....</b>	<b>205</b>
<b>PowASsembler! Preview.....</b>	<b>71</b>	<i>Falling and Velocity.....</i>	<i>108</i>	<b>Appendix D: Tables.....</b>	<b>215</b>
<i>Acquiring Meta-Abilities.....</i>	<i>71</i>	<i>Fatigue.....</i>	<i>109</i>	CHARACTER SHEET.....	220
<i>How Meta-Abilities Work.....</i>	<i>72</i>	<i>Gravity Differences.....</i>	<i>109</i>	<b>Core Glossary.....</b>	<b>222</b>
<b>Heroic Intentions.....</b>	<b>73</b>	<i>Heat Dangers.....</i>	<i>110</i>	<b>Legal Information.....</b>	<b>224</b>
<i>Recognition Checks.....</i>	<i>74</i>	<i>Investigation Montages.....</i>	<i>110</i>	<i>Open Game Content Declaration.....</i>	<i>224</i>
<i>Losing Recognition.....</i>	<i>74</i>	<i>Minions, Flunkies and Passers-by.....</i>	<i>112</i>	<i>Product Identity Declaration.....</i>	<i>224</i>
<i>Gaining or Losing Reputation.....</i>	<i>75</i>	<i>Poison and Drugs.....</i>	<i>113</i>	<i>Open Game License Version 1.0a.....</i>	<i>224</i>
<b>Action Points.....</b>	<b>76</b>	<i>Radiation.....</i>	<i>115</i>	<i>Section 15. Copyright Notice.....</i>	<i>225</i>
WHEN TO USE ACTION POINTS.....	76	<i>Seers and Scrying.....</i>	<i>116</i>		
		<i>Starvation and Thirst.....</i>	<i>116</i>		

# Introduction

Assembler! Core organically grew out of many Action! System projects that I've been involved with. The funny thing is that I just wanted to play a game based on my favourite mecha series but using a more flexible system than the original RPG rules. To do this I wanted to build these mecha from scratch and not allow them to suffer the ridiculous 'power creep' the original RPG subjected to the mecha, armour and weaponry. However, the AIS didn't have a mecha creation system.

No problems, I'll just build myself a set of rules to create various mecha and spacecraft from existing OGL material. MechASsemble was born out of that attempt. I took a nice relaxing week off, sat on a balcony overlooking a beach and sipped on rum 'n' coke while working up the first version of my mecha rules.

Alrighty then, the mecha series also had some pseudo-mysticism involved. I decided that there really should be some dedicated super abilities and traits that would allow the point balance I so desperately craved from my HERO SYSTEM® days when creating a character. Trawling the web again I found some more OGL rules and bent them to my will, building the first edition of the CharactASsemble rules.

Righto I've done it... I could now go and build my mecha campaign. However I was lured to the part-time publishing world by two great guys who eventually divested themselves of the project to another publisher. I was to contribute to their modified set of OGL rules that would build upon the base Action! System and create a new set of Core Rules that was actually very similar to what CharactASsemble already turned out to be. Creative differences with the Core author led me to bolt from that project quick smart. But soon after, I did manage to squeeze out the mechanics to an Anthropomorphic RPG based on a long-running web comic.

Okay, I've gotten published. Mum and Dad have been shown that their nerdy son is on [amazon.com](http://amazon.com), I should have loads of time to get my mecha campaign up and running right?

Of course not, I went and volunteered for what was supposed to be a quickie job. I was tasked to build some superhero rules. This quickie job soon became a major task. I had built the powers, which were inspired and culled from various OGL materials. I had enhanced the AIS mechanics to allow some superhero action. I even prepared a version of MechASsemble to supplement these core rules for a co-released book. But do you think I could flesh out the last 20% of either? Nope. This was partly because the book wasn't going to be finished without a setting section to go with it. I didn't have the time nor the inclination to go the whole hog with that.

My new job was a creative position requiring all that RPG brainpower to be allocated elsewhere. Instead of a job where I could cruise through the day, leaving plenty of petrol in the tank for my hobby, my new vocation left me mindlessly watching TV and drooling out the corner of my mouth during the evenings.

In the end, I sent the publisher everything I had written for them and I really hope they find someone to finish off that book.

So I've gotten out of the publishing game. It's too much self-imposed stress for little remuneration. I'd much prefer to share my work with the world and get feedback from the guys and girls who actually use this stuff in their games.

The Open Gaming License means that if you want to use this stuff, then go right ahead. If you use this book and publish what you use in something else then make sure that you follow the licence and credit the prior contributors properly.

As for me; I'm over the Game Mechanics game. It's a tedious, non-recognised task that I had major problems finalising. ASsembler Core will keep evolving when I find that there is a deficiency in my gaming campaign.

This is not a professional body of work. I doubt I could be enticed back into that game actually. I tip my hats to all that have the intestinal fortitude to etch out a paid future in their hobby.

However I am pretty excited to aggregate over 4 years of tinkering into one big set of rules... the rules that you've printed out on duplex (to save paper on your boss's printer). Maybe some entrepreneurs have thrown these rules onto their web site with some nice graphics and another name.

Please feel free to email me with corrections, questions, criticisms and of course complements.

Now... back to that damned Mecha Campaign!!!

## Document Key

I'm using the PDF format to it's potential to give a reader some notes on my thoughts around building mechanics. I'll do this by creating comments attached to a few 'icons':

☐ Denotes a Mechanics Note. Any extra information for a GM or Player to discern what was going through my head during the creation of a rule.

☺ Denotes an Author's Note. Just some running commentary on a section.

## The Basics

In this section we present a quick overview of the most basic rules of the game.

### Dice

The game rules use three six-sided dice. It's traditional to abbreviate "three six-sided dice" by writing "3d6." In this custom, the first number is the number of dice being used (in this case 3) and the second number represents the type of dice being used (specifically, number of sides they possess), so "d6" means "six-sided dice."

Six-sided dice are the common, square-shaped dice that can be found in many board games. They can also be purchased in many general department stores, but chances are you have at least three of these dice somewhere in your

house, in other games.

There are options to use other numbers and kinds of dice, which are discussed in other optional rules. For now all you need to play the game using the core rules are 3d6—three six-sided dice.

## The GM

One member of the group assumes the role of moderator and controls the Non-Player Characters (“NPCs” for short). This player is known as the Game Master, or GM.

In situations when the rules are unclear or need to be applied in a new or unique way, the GM uses his or her best judgement. The GM also constructs the basics of the game. Basics include the setting, theme, NPCs and some goals for the players’ group, normally called a Party, but also referred to as a Team, Troupe, Group, or Cabal.

One thing GM’s should be comfortable saying to their players during the character construction phase is the word “No.” Point-based creation rules are usually subject to interpretation and ASsembler Core is no exception. Games such as Assembler Core open up all sorts of possibilities for creating characters and NPCs, however any unbalancing aspects of a character should be shunned. If players understand that throwing 75% of their character’s points into a ranged lethal attack will limit their role-playing opportunities and turn their superhero into a one trick pony, they should not be upset at the explanation.

## Players and Characters

Each player has a fictional character, called a Player Character (or “PC”), a made-up person that the player will use during the game. The player chooses what his character does and says during the game.

Players are in no way assumed to actually *be* their characters. Players are real people. Characters are pretend. Think of the player as an actor, and the PC as a role that the actor is playing in a movie or play, and you’ll begin to get the idea.

## Attributes & Skills

Each character has attributes and skills that represent the character’s personal ability or aptitude in various areas or for performing certain tasks.

Each attribute and skill has a numerical score. This score tells you how strong or proficient the character is in that area. Most characters will have scores from 1 to 10, which represents the normal human range of ability. Superheroes will usually have certain attributes that are much higher than human norm.

The trait and super ability sections allow for the creation of superhuman capabilities.

### Attributes

There are six attributes, which are arranged in two groups: Body and Mind.

Each group contains a Power Attribute, an Aptitude Attribute and a Resistance Attribute.

New attribute groups can be added, providing more variety and additional attributes for characters, but the core rules use only these two.

### Skills

Each character also has skills, which represent the character’s general ability or aptitude in various tasks. There are skills for arts and crafts, using weapons, and even diplomacy. Skills reflect how good your character is at what he knows.

Skills are also arranged into groups. Each group contains from 5 to 8 related skills.

Each skill is associated with a specific Attribute Group. Persuasion, for example, is associated with the Mind Group, whereas the Swords skill is associated with the Body Group.

When a character attempts a simple task, such as walking or opening an unlocked door, the player doesn’t need to roll dice. When a character attempts an action that has a chance of failure, however, such as attacking an opponent or manoeuvring a car through an obstacle course, the player must make a skill roll.

## Skill Rolls

Skill rolls are used to determine if a character is successful at some attempted action or task.

Players decide if they want their character to perform an action. An action can be as simple as walking through a door, which would not require a skill roll. Sometimes there is a level of skill involved in performing the action, however, so the player may need to make a skill roll for his character. The GM decides whether or not an action requires a skill roll.

### Attribute + Skill

If the GM determines that a player’s chosen action requires a skill roll, the GM determines which Skill and which Attribute (from the Attribute Group associated with the skill) apply to the task.

If a character attempts to shoot an opponent with a revolver, the player must make a Pistols skill roll. Because the Pistols skill is associated with the Body Group, the GM must choose Strength, Reflexes, or Health as the attribute that the player uses with the Pistols skill. The logical choice is Reflexes, the Aptitude Attribute for the Body Group.

## Difficulty Levels and Target Numbers

The GM then determines the Difficulty Level (or “DL”) of the action being attempted. Each Difficulty Level has an associated Target Number (abbreviated as “TN”; see the *Difficulty and Target Number Chart*). The more difficult the action being attempted is, the greater the Difficulty Level and the higher the Target Number.

The Target Number is the number that the player must meet or beat when making a dice roll in order for the task to be successful. A Target Number of 18 would be shown as “(TN 18).”

### Making the Roll

To make a skill roll, a player rolls 3d6 and adds his character’s attribute and skill scores to the number rolled on the dice. If this new total is equal to or more than the Target Number, the attempted action is successful. If the total is lower than the Target Number, the attempt fails.

## Attribute Rolls

Attribute rolls are made much the same as skill rolls, with the GM determining a Difficulty Level and assigning a Target Number. The difference is that instead of adding an attribute score to a skill score, the player simply uses the character's attribute score and then adds that number to the dice roll.

John's character has a Reflexes score of 4. The GM tells John to make an Difficult attribute roll (TN 21) using his character's Reflexes. John checks his character's Reflexes score of 5. He then rolls 3d6, and gets 13. Because 13 plus 5 is less than 21, John's character's attribute roll is unsuccessful. See skills for enhancing the chances of successful rolls.

## Damage

If a character suffers injury, such as from being hit by a weapon or falling into a pit, the injury is represented by *damage points*. Damage points are subtracted from the character's Life Points. When a character's Life Points are reduced to 0, the character is dying.

## Campaign and Power Level

The game rules are versatile enough to handle games simulating adventures of average, everyday heroes, cinematic action heroes from fiction (novels, television and movies), high-powered, epic or supernatural heroes, and even giant monsters!

GMs and the other players should discuss the nature of the upcoming game. Before any characters are created, the GM should outline such details as genre, setting, campaign duration, story boundaries, and expected time commitment. As a player, readers should listen closely to the GM's descriptions since it will impact directly on the character to be created.

Ask for clarification of any rule modifications the GM plans to use as well as any background restrictions on the character. If the reader has any game preferences involving issues such as combat intensity, maturity level, or drama versus comedy ratio, let the GM know about them. Help the GM create the game that you all want to play.

To reflect the type of heroes being portrayed in the game, the game uses Campaign Levels.

The three Campaign Levels are Realistic, Cinematic, and Extreme. This book has suggested points to be allocated to these levels. The GM should adjust according to his or her campaign design or comfort level.

### Realistic

*Realistic* games are those in which the player characters are life-like, everyday heroes. For example, the characters may be street cops, investigators of the occult or otherworldly horrors, or soldiers in World War II.

*Realistic* games typically involve real-world situations (and their after-effects) faced by everyday heroes. Because characters are not as capable of physically handling devastating encounters and traumatic events as cinematic or heroic characters, *Realistic* games tend to involve more role-playing than combat and action, though this needn't be the case for all games. If elements of the fantastic are present in the game setting, they are usually obscure and mysterious and beyond the grasp of the PCs. For example, while many people may believe that magic and miracles are real, there is generally no way to scientifically prove so.

### Cinematic

*Cinematic* games are those in which the player characters are larger-than-life action heroes such as those found in fantasy, science fiction and action stories. The characters may be maverick cops (such as the characters portrayed in many police-oriented dramatic and action films and television programs), unlikely but capable heroes, avenging do-gooders and battlers of evil, Japanese chanbara (sword fight film) heroes, or heroes in a science fiction setting or fantasy setting.

*Cinematic* games typically involve lots of high-action and plausible, albeit unlikely, situations. The heroes tend to be highly capable, as do the major antagonists. Minor enemies (henchmen, flunkies, goons, mooks, etc.) are dangerous and numerous, but not as skilled as the heroes. *Cinematic* games tend to involve as much role-playing as they do combat and action. If elements of the fantastic are present in the game setting, they are usually accessible to the characters if not altogether common. For example, magic spells or advanced technology, such as blasters and starships, may be available in the setting.

### Extreme

*Extreme* games are those in which the player characters are heroes of epic or supernatural power or abilities (or both), such as those found in superhero comic books, many *animé* films and cartoons, and even some video games. The characters may be superheroes, seemingly normal but powerful heroes, heroes with access to incredibly powerful abilities, devices, or supernatural creatures or themselves beings of incredible power or ability, Japanese *sentai* fighters or even giant monsters (such as those in the Japanese *kaiju* genre films)!

*Extreme* level games typically involve lots of high-action and implausible, if not impossible (in the real world), situations. Entire city blocks (and sometimes entire worlds!) may be destroyed in the wake of powerful battles between entities. The heroes are often among an elite group of meta-powered beings, often called upon to save their locale from one threat or another. Minor enemies are an annoyance, though typically many in number and not nearly as skilled as the heroes. *Extreme* games tend to involve more combat and action than role-playing. Elements of the fantastic are a staple of this level of game play, though they are usually accessible only to a limited group of people. For example, meta-abilities may be present but the vast majority of people are "normals" rather than "supers."

The following table shows the **suggested** limits (or lack thereof) to each campaign level.

**Maximum Attribute Score:** Each player gets a number of points to divide among the character's attributes. The suggested maximum helps the player distribute the total attribute points available for character creation.

**Maximum Skill Level:** This column shows the maximum recommended level that a character can attain a skill during the creation phase.

**Maximum Power Level:** The maximum number of levels a character can have in a meta-ability. See Meta-Abilities chapter for more information.

### Suggested Campaign Level Character Points

Campaign Level	Attributes			Character Points		
	Sugg. Maximum Attribute	Avg. Attribute	Starting Attribute Points	Max Skill Score	Max Power Level	Starting Character Points
Realistic	5	4	25	6	6	60
Cinematic	8	6	35	8	10	100
Extreme	None	8	50	NA	NA	150

## Attributes

Attributes are scores that reflect the character's basic physical and mental abilities. In short, the core attributes define the character's "body and mind."

### Body Group

The three attributes that define a character's "body" or physical being are Health, Strength, and Reflexes.

#### Strength (STR)

Strength (abbreviated STR) is the "Power" attribute for the Body Group. STR represents raw physical prowess, including the ability to lift, push and otherwise exert force.

The total weight that a character can lift to waist level without moving (i.e., dead lift) is shown on the *Basic STR Table*. A character is able to carry (lift and move) weight equal to half his lift capacity. A character can drag or pull twice his lift capacity.

Tom's character has a STR of 7. He can dead lift 250 kilograms (about 550 pounds), he can carry 125 kilograms (275 pounds), and he can drag or pull up to 500 kilograms (1,100 pounds)!

#### Reflexes (REF)

Reflexes (abbreviated REF) is the "Aptitude" attribute for the Body Group. REF covers the character's agility, coordination, reaction, and overall speed. The higher a character's REF, the more dexterous and agile he is, and the better his sense of balance is. A REF of 0 represents total lack of control over one's muscles and movement (e.g., severe palsy or total paralysis).

#### Health (HLT)

Health (abbreviated HLT) is the "Resistance" attribute for the Body Group. HLT reflects the character's overall constitution, general health, resistance to disease, and overall fitness. The higher a character's health, the more resistant he is to illness and physiological degradation and injury. A HLT of 0 represents an absence of life (i.e., death).

### Mind Group

The three attributes that define the character's "mind" or mental and emotional being are Presence, Intellect, and Will.

#### Presence (PRE)

Presence (abbreviated PRE) is the "Power" attribute for the Mind Group. PRE represents the character's general personality, charm, charisma, and innate persuasiveness. The higher a character's PRE, the more influential he can be. A PRE of 0 represents a total lack of personality, charisma, and emotion (e.g., a brick or a wall).

#### Intellect (INT)

Intellect (abbreviated INT) is the "Aptitude" attribute for the Mind Group. INT represents the sharpness of the character's mind, clarity of thought and overall alertness. The higher a character's INT, the brighter and more perceptive he is. An INT of 0 represents a complete lack of intelligence and thought (e.g., brain death or an inanimate object).

#### Willpower (WIL)

Willpower (abbreviated WIL) is the "Resistance" attribute for the Mind Group. WIL reflects the character's mental strength, ego, and force of conviction. The higher a character's Willpower, the greater his resolve, focus, and level of concentration. A WIL of 0 represents no resistance to emotional influence and/or a complete lack of self-awareness (e.g., an automaton, robot or zombie).

### Attribute Scores

All attributes are based on a scale of one to ten (1-10), denoting the normal human levels of possibility. Characters in certain types of games may have attributes with scores higher or lower than humanly possible.

The higher an attribute score the better the character is in that area. For example, a character with a Strength of 3 is average, whereas a character with a Strength of 1 is roughly equivalent to an infant or small animal.

A score of 9 or 10 represents the pinnacle of human achievement. It should be rare to encounter someone with an attribute or skill at this level (at least among NPCs), and such a person may be well-known for his ability.

For example, a strength score of 9 could represent the strength of an Olympic weight-lifter and an Intellect of 10 could



represent Hawking-like genius.

Scores higher than 10 are superhuman and are only possible through some unusual or supernatural means, such as drugs, magic, or paranormal power. Creatures, legendary beings, superheroes, and otherwise extraordinary beings are not subject to the maximum score of 10 rule.

A score of 0 means the character has absolutely no capability in that area. Generally, if a character's attribute drops to 0 for any reason, the character is completely impotent in that area.

## Buying Attributes

Characters have numerical scores that define their basic capabilities, called Attributes. Each character can also have traits, benefits, and skills. These are described in detail later in their own sections.

Attributes cost 1 Attribute Point for each level in an attribute. Buying a STR of 5 for a starting character, for instance, has a cost of 5 Attribute Points.

Each player gets a number of points to divide among the character's attributes. This number is usually equal to the average attribute score used by characters in the game multiplied by the number of attributes used, rounded to the nearest 5. (See the table above.)

Attributes can be improved after character creation by spending Experience Points (see *Experience*, page 79). To increase an attribute by one level costs 5 times the new level in experience points.

*Colin wants to increase his character Darkmensch's current STR from 3 to 4. It will cost  $4 \times 5 = 20$  experience points to increase his character's STR to 4.*

## Maximum Attribute Scores

The recommended maximum score for any attribute depends on the campaign level of the game ( See the *Maximum Attribute Score Table*). Players may purchase up to the maximum score for any primary attribute. This limit does not include any bonuses for applicable Advantages (see the chapter on *Traits*).

*Jim is creating a character for a Realistic level game, with a maximum characteristic score of 6. Jim buys a REF score of 5 for his character and also buys the Super Attribute (REF) power and defines it as providing a +2 REF bonus to his character. This makes the character's effective REF score a 7, which is higher than the suggested maximum attribute score for the campaign, but is allowable.*

The GM is free to ignore this rule for his or her game.

Campaign Level	Sugg. Attribute Maximum Score
Realistic	5
Cinematic	8
Extreme	None

## Unspent Attribute Points

Any unspent Attribute Points may be converted to Character Points at a rate of 10:1. Character Points are used to buy advantages, benefits, or skills. This means that for every 1 Attribute Point that a player wishes to spend on something besides his character's attributes, the player can "exchange" the Attribute Point for 10 Character Points. Character Points can't be used to increase a character's attributes, however.

## Derived Attributes

There are also a few special attributes. They are not assigned points during character creation like the core attributes. Instead, the following attributes are derived from attributes in the Body or Mind Group.

Derived attributes in the core rules are Defensive Target Number, Initiative, Toughness, Life, and Move. You can create new derived attributes in addition to these.

Some special attributes can have scores higher than 10; derived attributes are not necessarily scaled the same as a character's attributes, such as STR, INT or REF.

Derived attributes can be increased using Character Points (but not Attribute Points). The cost for increasing each Derived Attribute above its base score is given in the description.

## Defensive Target Number (DEF)

A character's Defensive Target Number (abbreviated DEF) represents how difficult it is to successfully hit the character in combat. DEF becomes the base Target Number (TN) needed for any skill rolls made to hit the character in combat, for hand-to-hand, melee and ranged attacks. A character's DEF score may be modified up or down for variables such as distance, armour (heavy armour lowers a character's effective REF) and so on.

A character's DEF equals his **REF + 10**.

*Mike's character, Arelius, has a REF of 7. His REF+10 gives him a DEF of 17, so any characters who attempt to attack Arelius must roll against a Target Number of 17.*

The Defensive Target Number may be increased at a cost of 5 Character Points for each additional point of DEF. A character's DEF score may not exceed 20 in Realistic-level games, though it may be higher than 20 in Cinematic and Extreme level games.

## Initiative (INI)

Initiative (abbreviated INI) represents how quickly a character can act in a turn.

A character's Initiative equals his **(REF + INT)/2**, rounding up. At the beginning of each turn of combat (or any other time the GM calls for the players to determine initiative), each player rolls 1d6 and adds the number rolled to his

character's INI score.

The character with the highest INI total acts first in a turn. In cases of a tie, the character with the higher INT goes first. If both characters have the same INT, then the characters act simultaneously.

For more information about how Initiative works, see the section on *Combat*.

Initiative may be increased at a cost of 3 Character Points for each additional point of Initiative. A character's Initiative score may not exceed 10 in Realistic-level games, though it may be higher in Cinematic and Extreme level games.

## **Toughness (TGH)**

Toughness (abbreviated as TGH) represents a character's resistance to blunt force damage, such as from a punch, a baseball bat, or auto collision.

A character's starting TGH equals  $(STR + WIL)/2$ , rounding up.

When a character suffers damage from a pummeling, bashing, or blunt attack, subtract the character's TGH score from the damage, then subtract the remaining damage (if any) from the character's Life points (see *Life*, below). If a character suffers an amount of damage that does not exceed his TGH score, he suffers no loss of Life; he has completely shrugged off the attack.

*For example, Swingin' Sam has a Health of 4 and a Toughness of 8. In a fist fight with a bad guy, Swingin' Sam is hit by his opponent, and the GM rolls 19 points of damage. Albert subtracts Swingin' Sam's Toughness of 8 from the damage, leaving 11 points of damage.*

Toughness may also be used to decrease the damage suffered from some forms of *Special Damage* at the GM's discretion (see *Damage*, page 93).

Toughness may be increased at a cost of 5 *Character Points* for each additional point of Toughness. A character's Toughness score may not exceed 10 in Realistic level games, though it may be higher in Cinematic and Extreme level games.

## **Life (LIF)**

Life (abbreviated as LIF) points are used to keep track of damage a character suffers during an adventure. Any time a character suffers damage, he temporarily loses a number of Life points equal to the points of damage inflicted.

A character's LIF points equal  $(HLT \times 3) + (WIL \times 2)$ .

*Continuing from the example above, Swingin' Sam has a Health of 3 and a Willpower of 5, so he has  $9 + 10 = 19$  Life points. Albert subtracts the 11 points of damage from his character's Life points. After getting punched, Swingin' Sam has 8 Life points left.*

Stunning and deadly damage are both subtracted from a character's LIF (see *Damage*, page 93). When a character reaches 0 LIF from lethal damage, they are dying. If a character suffers combined stunning and deadly damage that exceeds the character's LIF, the character is unconscious but not dying.

*Swingin' Sam has 19 LIF points. He has suffered 11 points of stunning damage from a punch and then a short time later he is shot (Sam's had a hard day) and suffers 8 points of deadly damage. Sam has suffered 11 points of stunning damage and 8 points of deadly damage, for a total of 19 points of damage, bringing his current LIF points to 0. Sam is unconscious. Until he regains some of his LIF points back (either from healing, medical aid or other means) he will remain unconscious.*

Life may be increased at a cost of 2 *Character Points* for each additional point of Life. A character's Life score may not exceed 50 in Realistic-level games, though it may be higher in Cinematic and Extreme level games.

## **Society (SOC)**

The Society attribute (abbreviated SOC) keeps track of the character's place in the world. A character's SOC attribute is susceptible to their interaction within the campaign. Society can be used in various ways, such as a recognition check by Joe Public to see if they know the name and general history of the character. A saving throw can be made equivalent to a social DEF roll to see how the character's reputation is perceived not only by the public at large but by law enforcement authorities and governments. Costumed adventurers must earn public acceptance by battling villains, acting responsibly, and avoiding collateral damage as a result of their deeds. The **Heroic Intentions** section on page 74 shows how a character can gain or lose their SOC attribute.

Characters engaging in criminal acts will find their Society Attributes swiftly dropping into the negative. For villains and anti-heroic loners, this isn't much of a concern, but most *ASsembler Core* characters are going to want (and need) to be scrupulously careful about maintaining a positive Society Attribute. The media, after all, plays a direct role in the acquisition of fame in the modern age. Note that SOC is more a representation of how discussed and speculated about a character is *at this very moment* than it is a measure of the historical record. Many powerful and important celebrities of decades and ages past would have relatively low Society ratings in *ASsembler Core* due to a lack of *current* media coverage.

A character's starting SOC points equal  $(PRE + WIL)/3$ , rounding up. Certain advantages and complications may change this. A player can increase their character's starting SOC at a cost of 5 CP per SOC depending on the character concept.

### **Is the Dark Side stronger?**

When a character does something that can cause a reduction in their Society attribute they do not actually lose the Character Points outright. Instead the CPs (lost SOC  $\times$  5) go into a pool for use to boost the character's body attributes, super powers or traits. The player, through their character must decide whether they wish to gain strength the easy way by losing further SOC attribute points or whether they lose their quick power gains by recovering their SOC attribute through their deeds in the campaign. The temptation exists both for the character and the players running them. It would be easy to build up their character's SOC attribute to a level past what they wish and then perform some misdeed to cash



in their reputation and recognition for some quick CP. However this could have the potential to taint the character. Even much later (years, decades) the character could have redeemed him or herself dozens of times over, but their indiscretions may occasionally haunt them.

*“Captain Galaxy has again saved the planet from the evil Voggins. Tonight at 8pm we interview the Captain about her triumphs, and briefly recount her past failings throughout her illustrious career. Nobody can forget that fateful day 7 years ago when a school bus was crushed under the weight of an invading space ship as the Captain looked on.”*

## Move (MOV)

Move (abbreviated as MOV) represents the distance a character can move in a single action. A character may move up to his MOV in meters each turn, as a normal Move action or, if running, up to 2x his MOV in meters per turn. A character may also sprint, moving up to 3x his MOV in meters per turn, but a character can only sprint for a maximum number of turns equal to his HLT, after which time he must rest for one minute for each turn spent sprinting (see *Taking Actions*).

A character’s MOV is **REF + (STR+HLT)/2**, rounding up.

*Albert is playing in a pulp adventure style game. His character, Swingin’ Sam, a brawler, has a REF of 6, a HLT of 5 and a STR of 4. Albert averages his character’s STR + HLT and gets 5. Then he adds his REF of 6, for a total MOV of 11. Swingin’ Sam can move up to 11 meters each turn normally (the equivalent of 13.2 kph or 7.8 mph) or 22 meters per turn when running (26.4 kph or 15.5 mph), and he can sprint for up to 6 turns at a speed of 33 meters per turn (about 40 kph or 23 mph)!*

Move may be increased at a cost of 5 Character Points for each additional point of MOV. A character’s MOV score may not exceed 10 in Realistic-level games, though it may be higher in Cinematic and Extreme level games.

## Basic MOV Table

Speed (m/turn)	Kph	Mph	Example
1	1.2	0.7	
2	2.4	1.4	Leisurely walk
3	3.6	2.1	
4	4.8	2.8	Average walking speed
5	6.0	3.5	M113 APC (water speed)
6	7.2	4.2	Brisk walk
7	8.4	4.9	Power-walk
8	9.6	5.6	Jog
9	10.8	6.4	Running a 9-minute mile
10	12.0	7.1	
11	13.2	7.8	
12	14.4	8.5	
13	15.6	9.2	
14	16.8	9.9	Running a 6-minute mile
15	18.0	10.6	
16	19.2	11.3	
17	20.4	12.0	Running a 5-minute mile
18	21.6	12.7	
19	22.8	13.4	
20	24.0	14.1	
21	25.2	14.8	
22	26.4	15.5	Running a 4-minute mile
23	27.6	16.2	
24	28.8	16.9	
25	30.0	17.6	
26	31.2	18.4	
27	32.4	19.1	
28	33.6	19.8	
29	34.8	20.5	
30	36.0	21.2	
32	38.4	22.6	
34	40.8	24.0	Attack submarine
36	43.2	25.4	

## Character Points

The Character Point (CP) pool are what players use to build the character's skills, traits and super abilities. Complications even refund some CP for use in other areas.

Separating attribute points from character points serves to balance the amount of points available to player when allocating the base attributes. While there are limits placed on a character's attributes based on the “Reality” level, it would be much too easy to allocate the maximum allowed points to every attribute if AP and CP were to cost the same.

Campaign Level	Max Skill Score	Max Power Level	Starting Points
Realistic	6	6	50
Cinematic	8	10	75
Extreme	NA	NA	100

## Skills

Heroes can sneak into the most well guarded lairs of criminal masterminds, and create devices beyond the understanding of modern science. They can piece together clues to a villain's latest plot and do things like running along tightropes or jumping across alleyways. They do so through the use of various skills, described in this chapter.

### Skill Groups

Skills are organized into Skill Groups, representing collections of skills with a logical common theme. Think of it in terms of a “skill tree,” in which Groups are the “branches,” with individual Skills being the “leaves.”

In simpler, “rules-light” games, only *Groups* are used. In many games, however, *Groups* and specific *Skills* (as well as sub-categories, called *Specialities* and *Types*) are used. Whether you use some or all of these in your game is up to you.

Game Type	Groups	Skills	Spec/Type
Very simple	X		
Moderate		X	
Detailed		X	X
Very detailed	X	X	X

### Why Skill Groups?

Buying levels in Skill Groups is a cost-effective way of increasing the character's proficiency with all the skills in the Skill Group. The cost is generally less (and at most the same) as buying levels with each individual skill, presenting a “discount” to players who wish to increase their character's scores for a group of related skills.

### Skill Group Scores

A score in one level is applied to the score for all other levels below it, but does not add to the score of any higher level. So, a score of 1 in a Group adds +1 to the score for any Skill or Speciality in that Group. This is called a “cascade bonus,” and is written as a second score, with any cascade bonus added in, in parenthesis after the basic score for that level. A score of 4 in a Skill does not add +4 to the score of the governing Group, however; Cascade bonuses only apply downward, not upward.

*Gordon the Barbarian has a score of 2 in the Melee Weapons Group, and he has the Swords Skill at +4. He would record the skills like this: Melee Weapons +2, Swords +4 (+6).*

When a character buys levels in a Skill Group, any skills within that group that require a “Type” must be defined when the group's levels are purchased. Skill Group levels apply only to the specific Skill “Type” selected by the character, not to all possible “Types” for that skill.

*Mike buys two levels in the Arts & Craft Skill Group. Because the specific skills Art and Craft both require a Type, Mike selects Art (Painting) and Craft (Silk-screening).*

### Skill Levels

The score reflects the level of competence or knowledge a character possesses for that skill. Skills are listed on the character sheet only if the character has levels in them. These are written on the character sheet as “**Skill +#**,” where “#” is the level of skill.

*Marge is playing in a modern conspiracy style game. Her character, Special Agent Glenn, has the Driving skill at level 3, so Marge writes it on her character sheet as “Driving +3.”*

The definitions below are not absolute, but meant as a guideline for players and GMs. To see the proficiency each level of skill represents, comparatively speaking, consult the *Skill Levels* table (next page 11).

### Specialities

Some skill names are followed by “(Spec).” These skills include a number of related specialities within the skill.

Players may buy additional levels with one of the specialities when purchasing the skill (see *Buying Skills*). The character pays 1 point for every 2 levels in a speciality. These levels are added to the basic skill score when making skill rolls involving the speciality.

Specialities are listed on the character sheet only if the character has levels in them. These are written on the character sheet as “**Skill +# (Speciality +#)**,” where “#” is the level of the skill or the bonus in that speciality. Otherwise, only the base skill is listed.

*Special Agent Glenn, has the Writing skill with a speciality of Reports. Special Agent Glenn has a score of 4 in the base skill and she has two extra levels in the speciality “Reports,” so Marge records it on her character sheet as “Writing +4 (Reports +2).”*

## Types

Some skill names are followed by “(Type).” These skills cover several sub-categories that may or may not be inter-related.

Players must select a specific “type” or category when purchasing the skill. The character’s score for that skill applies only to skill rolls involving that specific category or Type (i.e., each “Type” represents a separate skill).

Group Skill levels apply only to those “Types” that the character possesses, which must be chosen by the player when the Skill Group levels are purchased.

Types are listed in parenthesis following the skill name, as “**Skill (Type) +#**,” where “#” is the level of the skill.

Paradise wants to buy the Craft skill for her character. Because Craft requires the selection of a specific “type” of craft, Paradise selects Sculpting, and buys 2 levels in the skill. Paradise writes the skill on her character sheet as “Craft (Sculpting) +2.”

## Skill Levels Table

### Score Description

- |     |  |
|-----|--|
| 0   | <b>Clueless (Non-existent):</b> Characters with a rating of 0 in a skill have absolutely no idea about that Skill or how it works. They may have never even had heard of it before, much less know where to begin trying to accomplish an action with that skill. All skills are rated 0 until the Player uses his Character Points or Experience Points to purchase at least 1 level in that skill.   |
| 1   | <b>Novice:</b> The character is familiar with the field, having done moderate reading on the subject or watched the skill being performed by others, but has no actual hands-on experience of any significance. The character is new to the particular field or activity, essentially an apprentice or beginner (e.g., a hobby, a police academy recruit, a soldier in boot camp).   |
| 2   | <b>Amateur:</b> This level of knowledge indicates the character has become more familiar with the field, having read extensively on the subject with little or no formal training (e.g., an apprentice, fresh academy graduate, probationer or rookie). (Basic)  |
| 3   | <b>Trained:</b> This level of knowledge indicates the character has a general, working understanding of that field, having received instruction from someone of Experienced level (a skill score of 5) or above. The character has obtained hands-on experience and practised extensively under the tutelage of his mentor (e.g., an Associate’s degree, an experienced cadet, AIT or tech school graduate).   |
| 4   | <b>Competent:</b> This level of knowledge indicates the character possesses a good grasp on the details and theories of his chosen field or is capable of performing the action on his own without supervision (e.g., a Bachelor’s degree, 2-year cop, junior NCO, college athlete). (Professional)  |
| 5   | <b>Experienced:</b> This level of knowledge indicates the character is well qualified and informed in his chosen field, having used his knowledge or completed the action on several occasions in actual situations (e.g., a veteran professional, a senior NCO, veteran cop, professional athlete, a Master’s degree).  |
| 6   | <b>Specialist:</b> This level of knowledge indicates the character has become highly trained or informed in his chosen field or skill to the point he practices his skills on a regular or daily basis, even able to earn his living using skills in an occupation. Others may come to the character for training (e.g., Army Ranger, black belt, Olympic athlete, a Doctorate degree).  |
| 7   | <b>Expert:</b> This level of knowledge indicates the character has become an authority in his chosen field or skill, having honed his skills to perfection after continuous practice and use (e.g., a 10-year Special Forces veteran). Without regular training and active use of the skill it is nigh impossible for a character to exceed a score of 7 in most skills.   |
| 8   | <b>Master:</b> This level of knowledge indicates the character has excelled in his field, surpassing others of lesser dedication to become superior in quality, skill or achievement. There is very little the character does not know about this skill (e.g., a pioneer in the field).  |
| 9   | <b>Genius:</b> This level of knowledge indicates the character has risen to a level where he is using his great mental capacity, physical prowess, and inventive ability to make unique breakthroughs in his field, creating his own original styles and theories and setting new standards (e.g., Nobel Prize winning scientist).   |
| 10  | <b>Legendary:</b> This level of knowledge indicates the character has achieved the most rare and highest level of skill or knowledge possible, becoming a revolutionary figure in his field. He has become so talented that he inspires wonder, and is capable of creating, theorizing or performing any most related action with minimum effort (e.g., noted physicist Stephen Hawking, martial arts master Bruce Lee, child prodigy chess master). (Normal human max.) |
| 11+ | <b>Supernatural:</b> This level of skill surpasses normal human thresholds and enters into the realms of the augmented, enhanced, or metaphysical (e.g., computers may demonstrate this level of skill).   |

## Buying Skills

Groups cost 5 points per level. Skills (including Skills requiring a specific “Type”) cost 1 point per level. A Speciality costs 1 point for 2 levels. Levels in a speciality may only be purchased in pairs (i.e., a character cannot purchase 1 level in a Speciality).

The cost for each level of skill is shown below.

Level	Cost
Group	5 Pts./Lv
Skill	1 Pt./Lv
Skill (Type)	1 Pt./Lv
Skill (Specialty)	2 Lv/1 Pt.

Here's an example of how you might record some of your character's skills on your character sheet. We'll just use one Skill Group—the Arts & Crafts Group—in this example. In this example, the player has purchased 2 levels in the Arts & Crafts Skill Group, 2 levels in the Cooking skill, plus 2 additional levels in the cooking Specialty “Fast Food” (total cost: 13 CPs).

Name	Level	Total Level
Arts & Crafts	2	+2
Art (Painting)		+2
Cooking	2	+4
Fast Food	2	+6
Craft (Silk-screening)		+2
Jeweller		+2
Photography		+2
Smith		+2

## Using Skills

Skills are used in conjunction with attributes to resolve actions. When characters attempt an action in the game that has an uncertain outcome, the player tells the GM which skill his character is using and how he is using it. The GM sets a difficulty level for the task (see *Difficulty Levels and Target Numbers*, below).

### When to Roll

The most important thing to remember is that no skill rolls are needed for characters to accomplish everyday tasks related to their skill. Rolls are required only for tasks that are out of the ordinary for characters with that skill—no matter how hard they might seem to those without the skill.

Obviously, if everyone had to make a Driving skill roll just to drive to work, no one would survive the commute! Also, excess skill rolls only slow down the game. Save the rolls for amazing tasks or exciting action sequences involving great risks and daring acts.

*Ben's character does not have the Piloting (Helicopters) skill. Trying to fly a helicopter will be very difficult for him, and will require Ben to make a number of Attribute rolls at high penalties.*

*Jenny's character, however, has the Piloting (Helicopters) skill. She does not need to roll her skill at all to perform ordinary piloting tasks, such as taking off, flying and landing under normal conditions. But Jenny will have to make a skill roll for her character to land her chopper after it has been damaged by a Surface to Air Missile fired by terrorists, because this is an extraordinary task even for a trained pilot.*

Here's another example..

*Arzhange is playing the character of Dr. Raul Wayland, an emergency room physician aboard a futuristic orbital hospital in a science fiction game. Dr. Wayland has the skill of Medicine, along with various Science and Specialist skills representing his medical knowledge. Arzhange does not have to roll at all for Dr. Wayland to successfully diagnose ailments, suture lacerations, perform routine surgeries, and so forth. All these are everyday tasks for a trained physician, even though they might be impossible for a person without the skill of Physician to accomplish.*

*But when Peggy's character, Officer Becky West, is rushed to the ER on the verge of death after being riddled by laser fire in a shoot-out, the GM tells Arzhange to make a Medical skill roll for Dr. Wayland as he tries to save her life. The extent of her wounds makes this an extraordinary task even for a trained physician. Also, the dramatic tension of treating another character who has been severely injured makes this an exciting time for a skill roll.*

### Difficulty Levels

If the task or action that the character is attempting is a simple one (such as opening a door, climbing a ladder, starting a car, and so on), no skill roll is required—the character simply succeeds at the action. If the action has a possibility of failure, the GM should require the player to make a skill roll and set the appropriate difficulty level for the task.

As a rule, only tasks of “average” difficulty or higher (i.e., more difficult) require a skill roll.

The GM assigns a difficulty level based on how difficult he believes the task would be for an average person. Use the *Difficulty Levels & Target Numbers* table, below, to help you decide what kind of difficulty level to assign the task, if any. The Target Number (TN) is the difficulty target of a task that must be beaten by Attribute + Skill + 3d6, taking into account any modifiers.

### Difficulty Levels & Target Numbers

Description	TN
Average/Easy	12
Tricky	15
Challenging	18
Difficult	21
Demanding	24
Extreme	27
Legendary	30

## Target Numbers in Combat

In cases where a character is trying to attack another character, such as in melee or ranged combat, use the target's DEF as the base TN instead of the table above. If the character is actively defending himself, add the appropriate skill to the target's DEF score. In addition, the GM can then add any other modifiers, as appropriate. (see *Combat Modifiers*).

*Pat is playing Jake, a barnstormer pilot, in a 1920s otherworldly horror game. Jake has a DEF of 15 and is pretty good at barehanded fighting, with an Unarmed Combat skill of +5. During the game, a mad cultist tries to grapple with Jake. The GM decides that because they are both using the Unarmed Combat skill that Jake's Unarmed Combat score can be added to his DEF. The final TN that the cultist needs to hit Jake is therefore 15 + 5 = 20.*

## Making Sense of Difficulty Levels

While this may seem a little confusing, it's really very simple. Here's an example.

*Sven is a character in the French Foreign Legion on deployment deep into the African Congo jungle, walking on 'point' down a small gully when he spots a group of Hellcaster Demonites coming his way! Sven's player tells the GM, Mark, that his character scurries up the side of the gully and dives into the scrub to hide. Mark decides that diving into the woods quickly, before the Hellcaster troops can spot Sven, requires a skill roll. Mark isn't sure just how difficult a task it is, however, so he looks on the Generic Difficulty Levels table. Looking at the table, Mark figures the level to be one of the following: Average, Tricky, Challenging, Difficult, or Demanding. Mark thinks that diving into the woods, which includes avoiding rocks and such, is more than "average" or "tricky" difficulty, but is less than "difficult" and certainly not "demanding," so he assigns it a rating of "challenging." The GM tells Sven's player to make a Challenging Leaping roll. Challenging difficulty has a Target Number (TN) of 18. Sven's player rolls the dice and gets a total of 19—a success! Sven Walker leaps into the woods unseen, moments before the Hellcaster Minions pass.*

## Automatic Success & Failure

If the Target Number for any task is lower than the character's combined (**attribute + skill score + 3**), no skill roll is required—it's an automatic success for the character.

If the Target Number (TN) is greater than the character's combined **attribute + skill score + 18**, the player may still make a skill roll. In such cases, a natural roll of 18 on the dice (i.e., three sixes) indicates success.

Characters can also use Action Points to turn a failed roll into a successful one, allowing even untrained characters to succeed at nigh-impossible tasks, thus reflecting a more cinematic approach. The player characters are assumed to be heroes in most settings—there should always be *some* chance for heroes to succeed, no matter how difficult the task. (See *Action Points*.)

## Expanded Target Number Table

The following table indicates the modified target number based on the assigned difficulty of the task.

To use the table, simply add the character's attribute + skill scores (for skill rolls) or use 2x the attribute (for attribute rolls). Find that number on the left column, then read across until you find the number in the column for the assigned difficulty level of the task. For a skill roll to be successful, the player must roll the indicated number or higher *on the dice*.

***Bold italicized*** numbers indicate that the minimum roll needed is not obtainable with a simple dice roll, and that additional bonuses (such as the use of Action Points) may be required for the task to possibly succeed.

"No roll" indicates that the player does not need to roll the dice; the task is automatically successful.

### Target Numbers (Roll needed, or more)

Attribute +Skill	Average (TN 12)	Tricky (TN 15)	Challenging (TN 18)	Difficult (TN 21)	Demanding (TN 24)	Extreme (TN 27)	Legendary (TN 30)
1	11	14	17	20	23	26	29
2	10	13	16	19	22	25	28
3	9	12	15	18	21	24	27
4	8	11	14	17	20	23	26
5	7	10	13	16	19	22	25
6	6	9	12	15	18	21	24
7	5	8	11	14	17	20	23



Attribute +Skill	Average (TN 12)	Tricky (TN 15)	Challenging (TN 18)	Difficult (TN 21)	Demanding (TN 24)	Extreme (TN 27)	Legendary (TN 30)
8	4	7	10	13	16	19	22
9	No roll	6	9	12	15	18	21
10	No roll	5	8	11	14	17	20
11	No roll	4	7	10	13	16	19
12	No roll	No roll	6	9	12	15	18
13	No roll	No roll	5	8	11	14	17
14	No roll	No roll	4	7	10	13	16
15	No roll	No roll	No roll	6	9	12	15
16	No roll	No roll	No roll	5	8	11	14
17	No roll	No roll	No roll	4	7	10	13
18	No roll	No roll	No roll	No roll	6	9	12
19	No roll	No roll	No roll	No roll	5	8	11
20	No roll	No roll	No roll	No roll	4	7	10

## Which Attribute to Use?

All skills are associated with a primary attribute group—either the Body or Mind group. This is the group that contains the attributes associated with the common applications of the skill. The primary attribute group is indicated for each skill after the skill name.

In addition, suggested uses of specific attributes are also given (in parenthesis) in the skill description.

## Governing Attribute

Which attribute is used with the skill (called the “governing attribute”) depends on *how* the skill is being used. The most appropriate attribute used depends upon what the player says he wants to do. If the task involves exerting force, overbearing, or general power, the GM should assign the group’s Power attribute (PRE for the Mind group, STR for the Body group). If the task involves subtlety, finesse, accuracy, or aptitude, the GM should assign the group’s Aptitude attribute (INT for the Mind group, REF for the Body group). If the task involves endurance, stamina or resistance, the GM should assign the group’s Resistance attribute (WIL for the Mind group, HLT for the Body group).

*Tony is playing Sven Walker, our French Legionnaire stuck in the African Congo. Tony tells the GM that he wants to have Sven Walker convince a tribesman not to turn him in to the demon disguised as a jungle god. The GM asks him how he plans to do this. Tony says that Sven is going to try to intimidate the tribesman. The GM thinks about it and decides that intimidation is essentially a projection of the “power” of the character’s charisma, so he assigns PRE to the skill roll. Tony reconsiders, because Sven’s PRE score is only a 3, and decided to have Sven try to fast talk the native, in the hopes that the tribesman would get confused and let Sven go. The GM thinks about it and decides that baffling the native like that requires quick thinking and wit, so he assigns INT to the skill roll.*

## Unusual Applications of Skills

In most cases the logical governing attribute will be obvious. For instance, knowledge- and memory-based skills will most often use the INT attribute.

Occasionally, however, characters will use skills in such a way that using a different attribute makes sense. The GM should consider which attribute is the most applicable and assign it as the governing attribute for the skill roll. Which attribute from the primary group is used with the skill to resolve actions depends on how the skill is used, as described by the player.

*Example 1: a player tells the GM “My character is going to stay awake and drive all night if he has to.” The GM decides that knows that this requires the Driving skill. Ordinarily, a Driving roll would use REF, but using the REF attribute just doesn’t make as much sense as using HLT in this case. HLT deals with stamina and fatigue, whereas REF deals with reaction and coordination. The GM decides to require the player to make a skill roll using the character’s HLT + Driving, and decides that “driving all night” is a Challenging task. The player must make a Challenging Driving roll using HLT (HLT + Driving + 3d6).*

*Example 2: Sean’s character has the Conversation skill, allowing him to unobtrusively gain information in casual discussion. Conversation affixes to the Mind group. If the character tries to gain information by flattering or charming someone, he uses PRE + Conversation. If he tries to trick someone into revealing information, he uses INT + Conversation. And if he tries to keep a woman talking until she doesn’t know what she is saying any more, he uses WIL + Conversation.*

## Both Body and Mind

Some skills can be used with both groups, depending on the specific application of the skill. This is perfectly acceptable, as long as it is plausible and the GM agrees to it.

*Sven Walker is captured by the tribesman after all and now Sven is being interrogated by Hellcaster minions in a tribal hut. But the minions are not interested in mind games; they intend to beat information out of him. Although the*

*Interrogation skill is associated with the Mind group, the GM thinks about it and decides that such physical tactics call for an exception to the rule, and the GM assigns STR to the roll.*

Skills that are the most likely candidates for using either attribute group are indicated by both icons.

## Making the Roll

The player rolls three six-sided dice (3d6) and adds the result to his character's skill score plus the governing attribute score. If the total meets or exceeds the target number (as indicated by difficulty level), the character has successfully used the skill.

Here is a summary of the steps of using a skill in the game.

### Using a Skill—Summary

1. [Player] **Choose a skill** for the task
2. [Player] Tell the GM **how the skill is being used**
3. [GM] **Determine difficulty level** (and Target Number) for the task
4. [GM] Determine governing **attribute** for the skill roll
5. [Player] **Roll** 3d6 + attribute score + skill score
6. If total meets or exceeds the Target Number, task is successful

*Tony tells the GM at one point that his character, Sven, is throwing a Helldagger he successfully palmed from an interrogator, at a rope to try to sever it. The GM tells Tony that Sven will need to make a Difficult Thrown skill roll, using Reflexes (as the governing attribute). Sven has Reflexes 5 and the Thrown skill at +4. Tony rolls 3d6 (three six-sided dice) and adds Sven's REF and Axes scores. Tony rolls  $13 + 5 + 4 = 22$ .*

*Any time a skill roll is required or suggested, it is written as "a [Difficulty] [Skill name] roll (TN)." For instance, if Sven's earlier escape into the scrub were presented as part of a published scenario, it might read "scrambling up the gully and diving into the bush requires a Challenging Leaping roll (TN 18)."*

## Effect Numbers

The Effect Number (EN) of a roll is simply the number of points by which a skill roll (i.e., attribute + skill + 3d6) exceeds the Target Number. If the dice roll is exactly the target number, the effect number is 0. If the TN is 14 and the skill roll total is 19, the Effect Number is 5.

Effect numbers can be used in several helpful ways in the game. They are used to determine the outcome of contested skill rolls, to determine the winner of a contest (whose arrow is closest to the bullseye?), to determine the progress of a long task (such as complex repairs, a masterful work of art, ongoing research), and so on.

## Contested Skill Rolls

When two characters are attempting to outdo each other using skills, it's called a *contested roll*. In a contested roll, both characters make their skill rolls, using any difficulty modifiers assigned by the GM. The character whose player achieves the higher adjusted skill roll total is the "winner." Examples of contested skill rolls include trying to sneak past a guard unseen (Stealth versus the guard's Awareness), an arm wrestling contest, and so on.

*Margaret's character in a science fantasy game, Laura Starwalker, tries to block a blaster shot by an imperial trooper with her energy blade. Laura Starwalker has a REF of 5 and Energy Blade +7. The GM makes a skill roll for the trooper. The trooper must make a successful skill roll, otherwise Margaret won't need to make an opposed skill roll at all (there's no need to try to block a shot that will miss anyway!). The GM rolls well enough for the trooper to hit his target. Margaret now needs to make an Energy Blade skill roll to block the shot. The TN for the block attempt is equal to the trooper's attack roll total—in this case 15. Margaret rolls  $9 + 5 + 7 = 21$ . She did it—Laura deflects the blaster shot with her energy blade!*

In situations in which each character must achieve a minimum level of effect in order to be partially successful (e.g., an archery contest to see who can hit the target closest to the centre), the GM may assign a TN to each player's skill roll. The player who achieves the higher effect number succeeds. In effect, the total of the first character's roll becomes the TN for the second character's skill roll. If both player's effect number is 0 (i.e., if the rolls are tied) there is no winner, because both characters failed at their respective attempts. (see *Effect Numbers*, above).

*Mike is playing Robin Hood, who has entered an archery contest. The TN to hit the target is 15. In the contest, each character makes a Simple Missile Weapons (Bows) skill roll against TN 15. That target number indicates merely hitting the target. The higher the effect number of the roll, the closer to the centre the shooter's arrow lands. Thus, the character with the highest effect number wins the round. One contestant rolled a total of 13, for an effect number of -2. The other contestants' effect numbers are 1, 2, 2, 4 and 6. Mike makes his Simple Missile Weapons (Bows) skill roll for Robin Hood and gets a total of 27—an effect number of 12! Robin Hood has won the round!*

## Which Skills to Use?

Note that not all of the skills listed will be appropriate for all campaigns. We have presented a number of skills that can be used in most settings. It is up to the GM to determine which skills will be allowed in a game. The recommended skills for a specific setting or genre will be listed in published genre and setting books.

## Generic Skill Group List

The following is a generic skill list. That is, it's not created for any particular setting or genre. GMs are encouraged to make up their own setting- or genre-specific skill list for their games, omitting and/or adding skills as necessary.

*Italicized* skill names indicate a universal skill. All characters receive universal skills at +2 for no cost. Characters with no points spent on a universal skill still receive the +2 bonus. Any points spent on a universal skill add to this default level. Common skills are skills common to all characters of a certain setting or genre (as determined by the published product or

by the GM). Those skills marked with an asterisk are suggested common skills for the Assembler Core modern setting.

## Skill Group

Skill	Tools	Governing Attribute(s)
<b>Arts &amp; Crafts Group:</b> Arts & Crafts skills are those primarily concerned with the creation of tools and knick-knacks, entertainment and pleasurable pursuits.		
Art (Type)	I	Body/Mind
Cooking (Spec)	I	Mind
Craft (Type)	I	Body
Jeweller	I	Body
Photography	R	Body
Smith (Spec)	I	Body
<b>Athletics Group:</b> Athletic skills are those involving physical pursuits, exertion, and sport. The Athletic Skills group includes the following skills.		
Acrobatics		Body
<i>Climbing</i>		Body
Contortionist		Body
Para (Spec)	R	Body
Sport (Type)	I	Body/Mind
Swimming		Body
<i>Throwing</i> (Spec)		Body
Unarmed Combat (Type)		Body
Zero-G		Body
<b>Communication Group:</b> Fairly self explanatory group. Various skills which enhances a character's interaction with the world whether it be through voice or the written word.		
<i>Instruction</i>		Mind
Negotiation (Spec)		Mind
Orate (Spec)		Mind
<i>Persuasion</i> (Spec)		Mind
Poetry		Mind
Writing (Spec)		Mind
<b>Covert Skills:</b> The shady side of society requires various skills to get by.		
Disguise	I	Body
Forgery (Spec)	I	Body
Gambling		Body/Mind
Lock picking	I	Body
Shadowing		Mind
Sleight of Hand		Body
<i>Stealth</i>		Body
<b>Education Group:</b> A character cannot survive on brute force alone. An skills in various subjects enhances their chances of solving various puzzles and problems as well as not making the same mistakes as history.		
Geography (Spec)		Mind
History (Spec)		Mind
Knowledge (Type)		Body/Mind
Language (Type)		Mind
Religion (Type)		Mind
Research (Spec)		Mind
<b>Enterprise:</b> Most forms of society have a system of commerce and without these skills, the character is just another citizen whom doesn't know how to get ahead in life.		
Accounting		Mind
Appraisal		Mind
Bureaucracy		Mind
Business		Mind
Economics (Spec)		Mind
<i>Professional</i> (Type)		Body/Mind
Trading		Mind
<b>Focus:</b> These skills rely on the character to utilise them depending on the situation.		
<i>Area Knowledge</i> (Type)		Mind
<i>Awareness</i> (Spec)		Mind
<i>Concentration</i>		Mind
Intuition		Mind
Lip Reading		Mind
<b>Heavy Weapons:</b> Conventional weaponry from troop support to vehicle mounted weaponry.		
Artillery (Spec)	R	Body
Machine Guns (Spec)	R	Body
Missile Launchers (Spec)	R	Mind
Portable Launchers (Spec)	R	Body
Vehicle Weapons (Spec)	R	Body

**Investigation:** A skills set which a character can use, not only in an occupational sense, but also to better understand his or her gaming environment. Spies, Police and Private Investigators would find this group of skills useful.

Cryptography		Mind
Deduction		Mind
Forensics	R	Mind
Intel Analysis		Mind
Interrogation		Mind
Surveillance (Spec)		Mind

**Medicine:** All sorts of medical professions can be created by varying the specialities in these skills.

Dentistry	I	Mind
First Aid * (Spec)	I	Mind
Physician (Spec)	I	Mind
Pharmacology		Mind
Surgery (Spec)	I	Body/Mind

**Melee Weapons:** The next step up from hand to hand combat. Ancient weaponry for low tech battles.

Axes (Spec)	I	Body
Bayonets	I	Body
Flexible Weapons (Spec)	I	Body
Knives	I	Body
<i>Maces/Clubs</i> (Spec)	I	Body
Polearms (Spec)	I	Body
Swords (Spec)	I	Body

**Military Sciences:** This skills set is primarily useful for military occupations or historical military enthusiasts.

Combat Engineer (Spec)	I	Mind
Demolitions (Spec)	I	Mind
Gunsmith (Type)	I	Mind
Strategy (Spec)		Mind
Tactics (Spec)		Mind

**Nature/Outdoor:** Characters with rural backgrounds or survival training would find skills in this group helpful.

Animal Handling (Spec)	I	Mind
Fish and Game (Spec)	I	Body/Mind
Navigation (Spec)		Mind
Riding (Spec)	I	Body
Survival (Spec)		Mind
Teamster (Spec)	I	Body
Tracking		Mind

**Performance:** The body is a vehicle for dramatization, emotion, and exhibition.

Acting		Mind
Dancing (Spec)		Body
Instrument (Type)	I	Body
Juggling		Body
Mimicry		Mind
Singing		Body/Mind
Ventriloquist		Body

**Sciences:** Various scientific occupations and specialities can be created by selecting this skill group.

Astronomy		Mind
Biology (Spec)		Mind
Chemistry (Spec)		Mind
Mathematics		Mind
Physics (Spec)		Mind

**Simple Missile Weapons:** One step up from melee weapons was the mastering of hand propelled missiles.

Boomerangs	R	Body
Bows (Spec)	I	Body
Crossbows (Spec)	R	Body
Sling Weapons (Spec)	I	Body
Slingshots	I	Body

**Small Arms:** Scientific advancement provided inventors with the means to take the ship's cannon and turn it into a hand weapon. This skill group is handy for military personnel or weapons enthusiasts.

Black Powder W. (Spec)	I	Body
Pistols	R	Body
Rifles	R	Body
Shotguns	R	Body
Sub-machineguns	R	Body

**Social Skill Group:** Social skills are those relating primarily to social interaction with and the influencing of others. Social skills are generally governed by the Mind group, though some can be assisted by physical appearance or ability.

Conversation*		Mind
Intrigue		Mind
Philosophy		Mind

Society (Type)	Mind
Style	Mind
Symbols	Mind

**Social Sciences:** While the social skill group helps in surviving in society, this group helps a character understand various societies.

Anthropology (Spec)	Mind
Archaeology (Spec)	Mind
Criminology	Body/Mind
Politics	Mind
Psychology (Spec)	Mind

**Technical:** The backbone of trade skills in various aspects of fabrication, maintenance and design.

Astrogation	Mind
Computers *	Mind
Electrician	I Mind
Electronics (Spec)	I Mind
Engineering (Type)	Mind
Mechanic (Spec)	I Mind
Operate Electronics (Spec)	Mind

**Transportation Group:** This skill group gives the character the know-how to operate and basically maintain a vehicle of a specific type. This skill group can change drastically depending on the campaign type (see the MechASsemble section for an example)

Driving (Spec)*	R	Body
Piloting (Spec)	R	Body
Mecha (Spec)	R	Body
Spacecraft (Spec)	R	Body/Mind
Water craft (Spec)	R	Body/Mind

\* Indicates a possible universal skill in modern or more advanced settings (GM Option)

R = Requires specialized tools.

I = Usable with improvised tools.

## Skill Descriptions

The following section provides descriptions for the skills listed on the Sample Skill List in the previous section.

Accounting .....	19	Crossbows (Spec) .....	26	Lip Reading .....	30	Shadowing .....	35
Acrobatics .....	19	Cryptography .....	26	Lock picking .....	30	Shotguns .....	35
Acting .....	19	Dancing (Spec) .....	26	Maces/Clubs (Spec) .....	30	Singing .....	35
Animal Handling (Spec) .....	19	Deduction .....	26	Machine Guns (Spec) .....	30	Sleight of Hand .....	35
Anthropology (Spec) .....	19	Demolitions (Spec) .....	26	Mathematics .....	30	Sling Weapons (Spec) .....	36
Appraisal .....	19	Dentistry .....	26	Mecha (Spec) .....	31	Slingshots .....	36
Archaeology (Spec) .....	19	Disguise .....	26	Mechanics (Spec) .....	31	Smith (Spec) .....	36
Area Knowledge (Type) .....	20	Driving (Spec) .....	26	Mimicry .....	31	Society (Type) .....	36
Art (Type) .....	20	Economics (Spec) .....	26	Missile Launchers (Spec) .....	31	Spacecraft (Spec) .....	36
Artillery (Spec) .....	21	Electrician .....	27	Navigation (Spec) .....	31	Sport (Type) .....	36
Astrogation .....	21	Electronics (Spec) .....	27	Negotiation (Spec) .....	31	Stealth .....	37
Astronomy .....	21	Engineering (Type) .....	27	Operate Electronics (Spec) .....	32	Strategy (Spec) .....	37
Awareness (Spec) .....	21	First Aid (Spec) .....	27	Orate (Spec) .....	32	Style .....	37
Axes (Spec) .....	21	Fish and Game (Spec) .....	27	Para (Spec) .....	32	Sub-machineguns .....	38
Bayonets .....	21	Flexible Weapons (Spec) .....	27	Persuasion (Spec) .....	33	Surgery (Spec) .....	38
Biology (Spec) .....	21	Forensics .....	27	Pharmacology .....	33	Surveillance (Spec) .....	38
Black Powder Weapons (Spec) ..	21	Forgery (Spec) .....	28	Philosophy .....	33	Survival (Spec) .....	38
Boomerangs .....	21	Gambling .....	28	Photography .....	33	Swimming .....	38
Bows (Spec) .....	21	Geography (Spec) .....	28	Physician (Spec) .....	33	Swords (Spec) .....	38
Bureaucracy .....	21	Gunsmith (Type) .....	28	Physics (Spec) .....	33	Symbols (Type) .....	38
Business .....	22	History (Spec) .....	28	Piloting (Spec) .....	33	Tactics (Spec) .....	39
Chemistry (Spec) .....	22	Instruction .....	28	Pistols .....	34	Teamster (Spec) .....	39
Climbing .....	22	Instrument (Type) .....	28	Poetry .....	34	Throwing (Spec) .....	39
Combat (Type) .....	22	Intel Analysis .....	28	Polearms (Spec) .....	34	Tracking .....	39
Combat Engineering (Spec) .....	24	Interrogation .....	29	Politics .....	34	Trading .....	39
Computers .....	24	Intrigue .....	29	Portable Launchers (Spec) .....	34	Vehicle Weapons (Type) .....	39
Contortionist .....	25	Intuition .....	29	Professional (Type) .....	34	Ventriloquist .....	39
Concentration .....	25	Jeweller .....	29	Psychology (Spec) .....	34	Water craft (Spec) .....	39
Conversation .....	25	Juggling .....	29	Religion (Type) .....	35	Writing (Spec) .....	40
Cooking (Spec) .....	25	Knives .....	29	Research (Spec) .....	35	Zero-G .....	40
Craft (Type) .....	25	Knowledge (Type) .....	29	Riding (Spec) .....	35		
Criminology .....	25	Language (Type) .....	30	Rifles .....	35		

## Accounting

The skill of keeping track of the money in any venture. This includes, but is not limited to, receipts, supply expense, rent, and all other areas of a profit and loss statement.



## Acrobatics

Characters with this skill are very agile and able to perform flips, tumble, and swing in exciting, swashbuckling fashion (REF). While any character can attempt such actions by making a REF check (see *Attribute Rolls*), characters with this skill do so in a much more flamboyant and impressive manner.

A successful use of this skill also allows a prone character to regain his feet as a free action, to “roll with a punch” (halving any damage received from a blunt blow), reduce damage from a fall (subtract the skill level in meters from the distance fallen before determining damage) or impose a -3 to skill rolls for attacks made against him that phase, due to his incredible dodging ability (may be added to any bonuses for the Dodge manoeuvre).

Acrobatics may be used as a complementary skill to Climbing, Combat (e.g. Balance and Somersault) and Jumping (GM's discretion).

## Tightrope Walking

An unencumbered character walking on a tightrope may move at his cautious movement as a standard action or his MOV as a full-turn action. If desperate enough, he may attempt a Reflex Attribute Save (TN 15+) in order to dash across at his running MOV as a full-turn action.

## Acting

Characters with this skill are adept at acting—more simply, feigning emotion and portraying roles that differ significantly from themselves (PRE). Actors also understand the finer points of dramatic expression and can appreciate theatrical performances from a more scholarly viewpoint than the average spectator (INT).

Successful use of this skill means the character performs in a manner that moves the audience, or appraises the quality of theatrical performances by others. The effect number of the roll determines the quality of the performance; the higher the effect number the better the performance, and, thus, the better the audience's reaction. This skill may also be used as a complementary skill to Persuasion or Orate in the appropriate circumstances (at the GM's discretion).

This skill is an important one for stage and screen actors, undercover police officers, shinobi (ninja), and any character to whom misleading others is important.

## Animal Handling (Spec)

Characters with this skill are proficient at working with animals, including care, feeding and grooming (INT), as well as training (WIL) and controlling them (PRE).

**Specialities:** Birds, Camels, Dogs, Horses, Reptiles, et al.

## Anthropology (Spec)

Characters with this skill are familiar with the customs, traditions, and myth about a culture, nation, or region (INT).

Skill checks are not needed for “common knowledge,” such as local holidays, the names of important local people, and so on.

A successful Anthropology roll provides the character with more obscure facts, such as the names of important persons or deities, methods of food preparation, and other details about the subject.

Note that this skill does not convey information about the local underworld or seedier side of the area. For that information the character will need the Society (Streetwise) skill.

**Specialities:** Specific culture or civilization.

## Appraisal

Characters with this skill can appraise the approximate value of items, including items for which the character does not possess a relative skill. Appraising an item requires a Challenging Appraisal skill roll (TN 18).

The skill roll may be modified depending on the following conditions. All modifiers are cumulative.

Modifier	Result
-3	Character has no training in or knowledge of the item
-3	Item is a rare or obscure specimen
-3	Unable to inspect or examine the item closely

Characters may use appropriate skills as complementary to Appraisal (GM's discretion). For instance, a character appraising a sword could use Smith (Weapon smith) as a complementary skill to the Appraisal skill roll.

## Archaeology (Spec)

Characters with this skill are trained in the systematic study of past (even prehistoric) human life and culture by the recovery and examination of remaining material evidence, such as graves, buildings, tools, and pottery. Characters also have knowledge of the science or study of antiquities (especially prehistoric antiquities), such as the remains of buildings or monuments of an early epoch, inscriptions, implements, and other relics, written manuscripts, and so on.

**Specialities:** Artefacts, Early Civilizations, Excavation, Paleobotany, Paleontology, Prehistoric Civilizations.

## Area Knowledge (Type)

Characters with this skill are familiar with the geography and popular culture of a certain area, be it a single street, a neighbourhood, a shire, a city, a terrain type (mountains, caverns) or an entire planet or star system. With a successful skill roll, characters with an Area Knowledge know the lay of the area, and can locate major and minor landmarks, major businesses or organizations, utilities, transportation centres (e.g., bus stations, ship ports and airports), and even knows notable people in the area, such as local celebrities and other popular folk.

Ross is playing Max, a bounty hunter in a cyberpunk genre game. Max is in San Angeles, a huge metropolis, looking for his target. Lucky for Max (but unlucky for the person he's hunting) he grew up in the city. Max has an INT of 4 and the skill Area Knowledge (San Angeles) at +5.

The TN is determined by the level of detail sought by the character. On a successful roll, divide the effect number of the roll by three, dropping any fractions. This is the number of additional pieces of information the GM should provide to the player.

Conversely, if a character is trying to recall as much detail as possible but has no specific information he is seeking, simply have the player attempt the skill roll and compare the total of the roll to the table below to determine how much detail the character is able to recall about the area.

Max knows that his target likes to hang out in expensive nightclubs frequented by local celebrities, so Ross asks the GM for a short list of likely places that fit the description. The GM decides that this information requires a Challenging Area Knowledge roll (TN 18). Because "big city" is the default area size for skill rolls, there is no modifier to the difficulty. Ross attempts his skill roll—22! The GM gives him the names of three nightclubs that match his criteria. Because Ross needed an 18 but rolled high enough to achieve the next higher difficulty level (with a corresponding Target Number of 21), the GM tells Ross that of the three nightclubs, the "Neo-Matrix" is currently the hottest spot in town, since it changed owners last month. Ross takes the hint and Max gets on his motorcycle and heads for the "Neo-Matrix" club. He has someone to capture...

Area Knowledge can be used as a complementary skill to any appropriate skill rolls. A character with Area Knowledge of a city could use it as complementary to Driving skill rolls during a car chase through the city, a character with an Area Knowledge of a terrain type could use it as complementary to a Survival skill roll, and so on.

Difficulty	Level of Detail
—	Very minor detail
Average (TN 12)	Minor detail (e.g., location of the nearest convenience store)
Tricky (TN 15)	Moderate detail (e.g., names of prominent citizens/local celebrities)
Challenging (TN 18)	Good detail (e.g., names of local leaders)
Difficult (TN 21)	Much detail
Demanding (TN 24)	Great detail
Extreme (TN 27)	Incredible detail
Legendary (TN 30)	Down to the last detail

Size of Area	Modifier
Apartment complex, street	+6
Neighbourhood, village, town	+3
Large city (Tokyo, New York)	+0
State, small country	-3
Large country, continent	-6
Planet, star system	-9

**Types:** Specific locale or terrain.

## Art (Type)

Characters with this skill are adept at creating works of art in a particular medium (REF). They also understand the finer points of artistic expression (INT) and can appreciate works of art more than the average person (PRE).

A type must be selected when this skill is bought. This skill may be purchased more than once, each time for a different type of Art.

Successful use of this skill means the character creates a quality work of art, recognizes the creator of the work, or appraises the quality or value of such works created by others. The effect number of the roll determines the quality of the work; the higher the effect number the better the quality, and, thus, the better the viewer's impression of the work.

This skill may also be used as a complementary skill to Social skills in the appropriate circumstances, such as if the character is giving a work of art as a gift (at the GM's discretion).

**Types:** Painting, Pottery, Sculpting, Sketching.

## Artillery (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of land-based, crew-served, artillery weapons, such as Howitzers, MLRS systems, and the like. This skill covers both towed and self-propelled artillery.

**Specialities:** AAA, Cannon, Multiple Launch Rocket System (MLRS)

## Astrogation

Characters with this skill are able to determine their approximate position in space, plot a course between two known points and navigate between and within star systems (INT). Astrogation may be used as a complementary to the Starships skill and others with GM's permission.

This skill is common among professional starship pilots, merchants, and smugglers in a sci-fi campaign.

## Astronomy

The character has knowledge of the study of stars and planetary bodies (INT), and includes knowledge of astrometrics, black holes, and the like. The extent of the character's knowledge will depend on the era in which the game is set (e.g., an astronomer in 2001 would know a lot more about outer space, as a rule, than one in 1801). The skill score reflects the depth of knowledge possessed by the character relative to the whole body of knowledge available in the current era.

## Awareness (Spec)

This represents the character's ability to spot, smell, hear or taste things that may otherwise escape attention (INT). The GM should call for an Awareness check any time a character may encounter a potential clue, may spot a shadowy figure in an alley, or any other appropriate situation. A success means the character has perceived the person or thing (a slight breeze, a shadowy figure, a minor detail, or what have you). An effect number of 6 or higher means the character has perceived the item in detail; the GM should provide additional information about the person or thing in question that will assist the character.

Awareness is a Universal Skill.

**Specialties:** Hearing, Sight, Smell/Taste, Touch.

## Axes (Spec)

Characters with this skill are adept at the use and care of hand axes (includes tomahawks, hatchets, and other one-handed axes) and battle axes (includes two-handed axes or "great axes") (REF). This skill is used when making attacks with such weapons (REF). (See *Combat* for rules on making attacks, damage, and so on).

**Specialties:** Battle Axes, Great Axes, Hand Axes.

## Bayonets

Characters with this skill are adept at the use and care of rifle-mounted blades (REF). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

## Biology (Spec)

The character has knowledge of biology (INT). The extent of the character's knowledge will depend on the era in which the game is set (e.g., a biologist in 2001 would know a lot more about biology, as a rule, than one in 1801). The skill score reflects the depth of knowledge possessed by the character relative to the whole body of knowledge available in the current era.

**Specialties:** Marine, Micro, or any other specialties approved by the GM.

## Black Powder Weapons (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of primitive or low-tech firearms. This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

In addition to firing a weapon, this skill can be used to reduce the time needed to reload one. The normal time required to reload a black powder weapon is 10 turns (about 1 minute). With a successful Challenging REF attribute roll (TN 18), the time required is reduced to 10 - EN turns (minimum time required is 1 turn).

**Specialties:** Blunderbuss, Pistols, Long Rifles.

## Boomerangs

Characters with this skill are adept at the use and care of boomerangs (REF). This skill is used when making attacks with such weapons (see *Combat* for rules on making attacks, damage, and so on). Some boomerangs are designed to return to the thrower if they miss their intended target (takes 1d3 turns). Some boomerangs are heavy weapons with one "arm" longer than the other, that are designed to deliver a deadly blow. The latter, heavy variety do not return in the same manner as their smaller, symmetrical cousins.

## Bows (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of bows. This skill is used when making attacks with such weapons (see *Combat* for rules on making attacks, damage, and so on), or to string a bow in a hurry (STR).

**Specialties:** Longbows, Short bows, Composite bows.

## Bureaucracy

The skill of dealing with bureaucracies and "cutting through red tape." Characters with this skill know what to expect from bureaucracies, how long things will take to get done and why (INT). In addition (and more beneficially), they also know how to get things done more quickly than normal, how to get in to see the "right people," and so on (PRE). Conversely, characters with this skill also know how to and how to slow projects down and impede requests to see people (WIL).

## Business

The knowledge and skill of running a business, from a lemonade stand to a multinational corporation. Business focuses on the day-to-day running of the business, including inventory, customer service, public relations and sales, but also covers broader topics, such as supply and demand, marketing, taxes, and business laws (INT). Business can also be used for skill rolls involving customer service and public relations (PRE).

**Specialties:** Marketing, Operations, Personnel, Public Relations.

## Chemistry (Spec)

The character has knowledge of chemistry (INT). The extent of the character's knowledge will depend on the era in which the game is set (e.g., a chemist in 2001 would know a lot more about chemistry, as a rule, than one in 1801). The skill score reflects the depth of knowledge possessed by the character relative to the whole body of knowledge available in the current era.

Mathematics is usually a complimentary skill to Chemistry.

**Specialities:** Biochemistry, Inorganic, Organic, or any other specialities approved by the GM.

## Climbing

Characters use this skill when climbing difficult surfaces or items, such as cliffs, walls, or ropes (STR). A successful check allows the character to move a number of meters equal to one half his MOV score or equal to his Climbing score (whichever is greater). Failure means the character has lost but regained his grip or footing, and has made no progress that turn. A serious failure (two or more levels below the difficulty of the roll) means the character has fallen (see *Falling*, page 108). Climbing is a Universal Skill; all characters receive it at level 2 at no cost.

## Combat (Type)

The skill of unarmed, hand-to-hand fighting. Characters must choose a type or style of unarmed combat when this skill is purchased. This skill may be purchased multiple times, each time for a different type of unarmed combat. If the character attempts to perform a manoeuvre that is against the spirit and training of that style, then the core points (level) spent in the combat skill can be used rather than the martial art's bonuses. It is this tweak to the combat skill that brings it into the realm of a speciality and not a type, thereby making it cheaper. A player and GM should take note of the limitations of the art form. Game Masters may find game situations do not allow a player to use their Martial Art moves when facing against a cybernetic being or massively super-powered entity. However, an Action! Point may cancel this limitation (depending on the GM). Please note I'm not a Martial Art connoisseur and the modelling opinions expressed in these rules are my own observations. GM's are encouraged to run with this rules format and build their own Martial Art skills.

Unarmed Combat (Brawling) is a Universal Skill; all characters receive it at level 2 at no cost. Purchasing a Martial Arts style gives the character cumulative bonuses each level the skill is taken (at the expense of the free 2 points of "Brawling". Players may use these martial art styles as the basis of a superior martial artist where character points would purchase semi-mystical meta-abilities and manoeuvres.

For each level in the skill, the martial art type will give additional bonuses to combat moves and/or attributes. For example, Presence can be incorporated into intimidation through a martial arts move or Kia Yell. Physical attributes bonuses as a part of Martial Arts conditioning are permanent additions to the character's attribute scores. Derived attribute bonuses however are dependent on the Martial Art form and can be negated by speciality limitations. If a skill is gained and the character doesn't already possess it then the skill starts at the number of points gained at that level.

*For example a master in Aikido (Skill level 8) would receive all the level bonuses that a Novice to an Expert would get. Similarly, a Competent Muy Thai martial artist would get a +1 to kick attacks but not the 2<sup>nd</sup> +1 bonus to TGH that a Specialist would receive.*

## Martial Art Forms

### Agency Self Defence

Government espionage and military departments give their operatives/soldiers basic hand to hand combat skills.

**Speciality Limitations:** Agency Self Defence is a capable combat form against other agents, laymen and wrestlers. They have no advantage over dedicated martial art forms and lose their bonuses when facing one.

Novice:	+1 to all Balance Rolls
Amateur:	+1 to Grab Rolls
Trained:	+1 to STR damage
Competent:	+2 to Restrain Rolls
Experienced:	+1 to Drop Rolls
Specialist:	+1 to REF attribute
Expert:	+1 to INI rolls
Master:	+1 to Unarmed Strike Rolls
Genius:	+1 to TGH
Legendary:	+2 to DEF
Supernatural:	+2 to Bind Weapon

Amateur:	+1 to Grab Rolls
Trained:	+2 to Roll with the Blow
Competent:	+2 to Restrain Rolls
Experienced:	+2 to DEF
Specialist:	+1 to Disarm
Expert:	+1 to Take-away
Master:	+1 to MOV
Genius:	+1 to REF attribute
Legendary:	+1 to Grab Rolls
Supernatural:	+2 to Drop Rolls

### Boxing

Boxing is a brutal combat form relying on fisticuffs to subdue an opponent. Boxing requires toughness and footwork to gain an advantage over an attacker before finishing them with a knockout blow.

**Speciality Limitations:** Boxing is an all-round art form that is still susceptible to kick intensive and aerial attacks.

Novice:	+1 to TGH Derived Attribute
Amateur:	+1 to Block Melee Attack
Trained:	+1 to Countering
Competent:	+1 to Unarmed Strike
Experienced:	+1 to STR Damage Bonus
Specialist:	+1 to Balance
Expert:	+1 to STR Attribute
Master:	+1 to PRE Attribute
Genius:	+2 to Combination
Legendary:	+1 to INI Derived Attribute
Supernatural:	+1 to Dodge

### Aikido - Martial Art Style

Aikido is a self-defence art of Japanese origin focused on using the energy of an opponent against himself with a variety of joint locks and throws.

**Speciality Limitations:** Aikido, while a capable martial art form defensively, loses its bonuses when applied in a purely offensive attack. Unless the Martial Artist is reacting to an attack, these bonuses do not apply.

Novice:	+1 to Throw Rolls
---------	-------------------

## "Hard" Kung Fu - Martial Art Style

There are so many styles and schools of Chinese kung fu that, for game purposes, they are split into two Types: "Hard" and "Soft." "Hard" kung fu is a physical, combative style centred on rapid punches, kicks, and other attacks.

**Speciality Limitations:** Hard Kung Fu is an offensively orientated form. Aikido has a negating influence on Hard Kung fu. The art form is also diminished against Wrestling and Soft Kung Fu.

Novice:	+1 to Unarmed Strike Rolls
Amateur:	+1 to STR damage
Trained:	+1 to Grab Rolls
Competent:	+1 to Dive Rolls
Experienced:	+1 to STR Attribute
Specialist:	+1 to Block
Expert:	+1 to Unarmed Strike Rolls
Master:	+1 to Swords Skill
Genius:	+1 to Acrobatics Skill
Legendary:	+2 Weapon Strike
Supernatural:	+1 to STR damage

## Jeet Kune Do - Martial Art Style

Jeet Kune Do is a versatile, highly improvisational fighting style developed by the legendary Bruce Lee.

**Speciality Limitations:** Jeet Kune do is susceptible to brute force attacks where improvisation isn't a virtue.

Novice:	+1 to all Balance Rolls
Amateur:	+1 to Block Mellee Attack
Trained:	+1 to Counterstrike
Competent:	+1 to Grab Rolls
Experienced:	+1 to Roll with the Blow
Specialist:	+2 to Unarmed Strike
Expert:	+2 to REF
Master:	+1 Roll
Genius:	+1 Take-Away
Legendary:	+1 Unarmed Strike
Supernatural:	+2 to Weapon Strike

## Karate - Martial Art Style

Karate is an outgrowth of ancient Chinese martial arts that may be traced (as we know it today) to the inhabitants of the island of Okinawa. Karate is typically a forceful style centred on punches, blocks, and kicks.

**Speciality Limitations:** Karate is susceptible to Akido and melee weapon based attacks.

Novice:	+1 to Drop Rolls
Amateur:	+1 to Grab Rolls
Trained:	+2 to all Balance Rolls
Competent:	+1 to Unarmed Strike Rolls
Experienced:	+1 to INI rolls
Specialist:	+2 to DEF
Expert:	+1 to TGH
Master:	+2 Leap Attack
Genius:	+1 to Unarmed Strike Rolls
Legendary:	+1 to STR Attribute
Supernatural:	+1 to STR damage

## Kenjutsu - Martial Art Style

Kenjutsu is the centuries-old Japanese art of swordsmanship. Although it has differentiated into a sport-oriented style (Kendo), this style represents the more traditional and combative method of training with a live blade.

**Speciality Limitations:** Kenjutsu is reduced to the base level when bereft of a suitable sword.

Novice:	+2 Swords Skill Bonus
Amateur:	+1 to Balance
Trained:	+1 to Disarm

Competent:	+1 to Weapon Strike
Experienced:	+1 to Counterstrike
Specialist:	+1 to STR Damage Bonus
Expert:	+1 to WIL Attribute
Master:	+1 to Combination Attack
Genius:	+1 to REF Attribute
Legendary:	+1 to Somersault/Flip
Supernatural:	+2 to Swords Skill Bonus

## Muay Thai - Martial Art Style

Muay Thai is a form of kick-boxing originating in Thailand.

**Speciality Limitations:** Thai Kick Boxing isn't effective against weapon attacks such as knife, nunchaku, staff, chain or tonfa.

Novice:	+1 to Balance
Amateur:	+1 to Countering
Trained:	+1 to TGH Derived Attribute
Competent:	+2 to Grab
Experienced:	+1 to STR Attribute
Specialist:	+1 to TGH Derived Attribute
Expert:	+2 to Unarmed Strike
Master:	+1 to STR Damage Bonus
Genius:	+2 to Leap Attack
Legendary:	+1 to Unarmed Strike
Supernatural:	+1 to TGH Derived Attribute

## Ninjutsu - Martial Art Style

Adherents of Ninjutsu are taught to move about softly, to infiltrate, to climb swiftly and unobtrusively, and to value shadows and silence as their allies.

**Speciality Limitations:** Ninjutsu is a commando form which is only effective if applied in a sneak attack or in low light conditions.

Novice:	+1 to Balance
Amateur:	+2 to Somersault/Flip
Trained:	+2 to Leap Attack
Competent:	+1 to Disarm
Experienced:	+1 to REF Attribute
Specialist:	+2 to Weapon Strike
Expert:	+1 to Climb
Master:	+1 to INI Derived Attribute
Genius:	+1 to REF Attribute
Legendary:	+1 to Grab
Supernatural:	+1 to Weapon Strike

## "Soft" Kung Fu - Martial Art Style

"Soft" kung fu styles are, as a general rule of thumb, more spiritual than "hard" styles, and more predicated on disarmament and defence

**Speciality Limitations:** This art form has difficulty with gaining an advantage over Akido, Wrestling and other soft Kung Fu styles.

Novice:	+1 to Balance
Amateur:	+1 to Somersault/Flip
Trained:	+2 to Grab
Competent:	+1 to Take-down
Experienced:	+2 to Counterstrike
Specialist:	+2 to Combination
Expert:	+1 to DEF Attribute
Master:	+1 to REF Attribute
Genius:	+2 to Dive
Legendary:	+2 to Bind Weapon
Supernatural:	+2 to Leap Attack

## Wrestling – Big Show Wrestling

A combination of gymnastics, street brawling and classic wrestling, Big Show wrestling can be a powerful combat form when combined with a powerful frame.



**Speciality Limitations:** Big Show Wrestling isn't effective without a STR attribute of at least 7. Also has difficulty against Karate and Hard Kung Fu.

Novice:	+1 to Grab
Amateur:	+2 to Take-down
Trained:	+2 to Combination
Competent:	+1 to Counterstrike
Experienced:	+2 to Throw
Specialist:	+2 to TGH Derived Attribute
Expert:	+2 to Roll With the Blow
Master:	+2 to Leap Attack
Genius:	+2 to Balance
Legendary:	+2 to Countering
Supernatural:	+2 to Somersault/Flip

### **Wrestling – Classic Greco Roman**

A structured style of combat that favours strength and

dexterity. The grappling nature of this art form makes it useful in subduing a foe provided the combatants are within reach.

**Speciality Limitations:** Classic Greco Wrestling is a susceptible to Hard Kung Fu and Karate.

Novice:	+2 to Grab
Amateur:	+2 to Restrain
Trained:	+2 to Countering
Competent:	+2 to Balance
Experienced:	+2 to Bind Weapon
Specialist:	+2 to Take-down
Expert:	+2 to Take-away
Master:	+2 to INI Derived Attribute
Genius:	+2 to Dodge
Legendary:	+2 to Roll
Supernatural:	+2 to Block Melee Attack

## **Combat Engineering (Spec)**

Characters with this skill know how to construct buildings, make fortified defences, dig foxholes, lay (and remove) anti-personnel and anti-vehicle mines, create roads and airstrips, breach barriers, construct bridges, etc., in a military environment or operation.

**Specialities:** Bridges, Defences, Mines, Roads.

## **Computers**

The knowledge and use of computer language code to create or alter software programs. Characters with this skill can create programs, hack computer networks, and so on (INT). This skill is used to operate, maintain, and upgrade computer hardware and software. It's also used for every manner of illegal and ill-advised computer use, from data piracy to hacking and cracking.

The length of time taken by a Computer check depends on the difficulty of the task at hand. An attempt to turn off the lights in a room with a simple environmental control program might take a minute. An attempt to create a national database of 5,000 meta-powered criminals with 200 fields of information per criminal might take months.

### **TN Task**

- |    |   |
|----|---|
| 12 | Assemble a desktop computer out of the box and install a commercial operating system.                           |
| 15 | Set up a local network of a dozen computers with data backup, 'net connection, and security systems.            |
| 18 | Write a fairly complex computer program without assistance from other programmers.                              |
| 21 | Create a somewhat innovative, commercially competitive program with a small team of specialists and assistants. |
| 24 | Hack into the financial records of a large, secure insurance company or bank.                                   |
| 27 | Hack the Pentagon.  |
| 30 | Hack SAC/NORAD and play a nice game of Global Thermonuclear War with their mainframe.                           |
| 35 | Create an Artificial Intelligence in your spare time with off-the-shelf hardware and software.                  |

**Retry:** A character may attempt to retry Computer checks as long as he is able, unless his actions cause an operating system to lock up, a program to crash, or a security protocol to activate. The frustration inherent in struggling with a computer may result in an additional -2 penalty to each subsequent check, at the GM's discretion.

**Special:** A character with 5 or more levels in Mathematics gets a +2 complimentary bonus on Computer checks involving programming or hacking. A character with 5 or more levels in Electronics gets a +2 complimentary bonus on Computer checks involving maintaining, installing, or modifying computer hardware. A character with 5 or more levels in Knowledge: Programming Languages gets a +2 complimentary bonus on almost all Computer checks. These bonuses are cumulative.

**Additional Notes:** Computer skill rolls are an extreme abstraction of a very complicated process, and a wide variety of circumstances can affect them:

### **Modifier Situation**

- |    |  |
|----|--|
| -2 | Character has no technical documentation (manuals, etc.) for the process at hand.        |
| -5 | Character is entirely unfamiliar with the operating system he is trying to use.          |
| -8 | Hardware or software is somewhat familiar, but designed for use with a foreign language. |
| +2 | Character has a surplus of available technical documentation or advice.                  |
| +4 | Character created some or all of the relevant software or hardware himself.              |
| +1 | Character has a simple program designed to help with the task.                           |
| +2 | Character has a complex program designed to help with the task.                          |

## Contortionist

Characters with this skill can contort their body into difficult or unusual positions (REF), and remain in such positions for long periods of time (HLT). Contortionists often also have an excellent chance to escape shackles, cuffs, and being tied up.

Restraint	TN
Ropes	Opposing Skill roll +3
Net	21
Handcuffs	24
Tight space	27
Restrain	Opposing restrain roll

For ropes, a character's Contortionist skill roll is opposed by the skill roll of the opponent who tied the bonds +3 (since it's easier to tie someone up than to escape from being tied up). For a tight space, a skill roll is only called for if the character's head fits but his or her shoulders don't. If the space is long, such as in an air shaft, the GM may call for multiple skill rolls. A character can't fit through a space that his or her head doesn't fit through. A character can make an Contortionist skill roll opposed by his or her opponent's restrain roll to get out of a restrain or out of a pinned condition (so that the character is just being grabbed). Doing so is an attack action, so if the character escapes the restrain he or she can move in the same turn.

Making a skill roll to escape from being bound by ropes, handcuffs, or other restraints (except a grabber) requires 1 minute. Escaping a net is a full-turn action. Squeezing through a tight space takes at least 1 minute, maybe longer, depending on the distance that must be crossed.

## Concentration

This is the character's ability to focus his concentration on some task (WIL), as well as his general memory (INT). Concentration rolls can be assigned by the GM when a character is picking a lock in the middle of a huge brawl, laying still on a battlefield while cannonballs explode around him, keeping an eye on someone from hiding during a distraction, recalling the name of the man who gave you a coin two months ago, and so on. Success means that the character is able to concentrate on the task at hand, despite any distractions for that turn, including skill roll penalties due to wounds (see *Wounds and Effects of Damage*).

Concentration is a Universal Skill.

## Conversation

The skill of obtaining information from someone through conversation, without raising suspicion or, perhaps, without the subject even knowing he has been manipulated (INT). Conversation can also be used to make "small talk," to gain someone's trust or build a rapport with him (PRE). The difficulty of the skill roll depends on the reluctance or inability of the individual to provide the information and the circumstances under which the conversation takes place.

## Cooking (Spec)

The skill of creating meals, from simple edible dishes to elaborate, gourmet meals (INT) including even artistic presentations of food (PRE).

**Specialties:** Cuisine, Ethnicity (e.g., Chinese, Italian), Fast Food, Gourmet.

## Craft (Type)

Characters with this skill are adept at some craft, as defined by the player, and understand the finer points of their craft, including common tools, patterns, and methods associated with it (INT). The character is able to create attractive and/or functional items (depending upon the defined craft) and earn a living with his craft (REF).

**Types:** Candle-making, Glazing (i.e., lacquering), Cobbling, Shipwright, Tanning, or any other reasonable craft that the player and GM agree upon.

## Criminology

The skill of crime-scene investigation. Characters with this skill can identify a crime scene (INT), as well as identify, preserve (INT), and collect (REF) evidence. Some common procedures include collecting samples of latent fingerprints, taking photographs, taking measurements, and preparing evidentiary diagrams. Characters also understand the basics of criminal behaviour and *modus operandi* of suspects (INT).

This skill can be used as complementary to Awareness (for knowing what to look for as well as likely places to look for them) and Deduction (figuring out who did it and why).

## Crossbows (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of crossbows. This skill is used when making attacks with such weapons (see *Combat* for rules on making attacks, damage, and so on), or to cock a crossbow in a hurry (STR).

**Specialties:** Hand crossbows, Heavy Crossbows, Light Crossbows, Spearguns.

## Cryptography

The skill of ciphering and deciphering data, including text, digital image files, and others (INT). The technology level of the setting will determine the kinds of equipment available to the character, if any, and the complexity of the ciphers and codes the character is likely to deal with.

A number of skills can be used as a complementary to Cryptography, depending on the circumstances and the GM's discretion. Characters deciphering a code that uses or involves a foreign language should be able to use their language skill as complementary, for instance. Likewise, Computer Programming could be used as complementary to Cryptography, for designing and running decryption software.

## Dancing (Spec)

This is the skill of dancing with grace and/or style (REF). Ballroom dancing is performed at large, formal balls, such as those thrown by royalty or the wealthy, and (in some cultures) is one of the skills expected of any cultured gentleman or lady. Dancing can also be part of important ceremonies, contests and other situations calling for stamina more than style or skill (HLT).

Successful use of this skill means the character is able to dance competently, following the steps and keeping time with the music. The character may be noticed as an accomplished and graceful dancer that evening, perhaps gaining the special attention of his partner, another suitor, or another person of note or repute.

Dancing may be used as a complementary skill for all appropriate Social skill rolls, at the GM's discretion.

**Specialities:** Ballet, Ballroom, Break, Disco, Popular, Tap, Tribal, or any other reasonable kind of dance that the player and GM agree upon.

## Deduction

Characters with this skill are able to take a few known facts and leap to a usually (at least partially) correct conclusion (INT). Successful use of this skill can reveal the names of likely conspirators, anticipate an ambush, or determine the likely motivation behind any unexpected action.

The player may ask to make use of this skill at any time. If granted, the GM should reward a successful Deduction check with some bit of information about the current adventure that the character does not currently have. Success means the character has gained one answer or several potential "right answers." Failure means the character has gained no insight or possibly bad "insight," suspecting an innocent, or some other misleading information that could result in an embarrassing (or deadly) confrontation if acted upon.

The GM should make the skill roll for the player in secret, telling the player only that which his character would "know," based on the outcome of the roll.

## Demolitions (Spec)

The skill of assembling explosive devices, placing them for best effect, and also disassembling and defusing them (INT). Characters with this skill can also identify types of explosive compounds, triggers and other related devices on inspection.

With a successful Demolitions skill roll, characters may increase the effectiveness of an explosive. For every 2 levels with the skill, the character may opt not to roll 1d6 of damage, instead making that die an automatic 6 for purposes of calculating damage. Alternatively, a character may instead convert each such die to an "automatic 1," reducing the overall effectiveness of the explosive, if he is able to tamper with or move the device without triggering it.

**Specialities:** Bombs, C4, Mines, Primitive, Warheads.

## Dentistry

Dentistry is the skill of cleaning and maintaining teeth. Successful use of this skill allows the character to diagnose symptoms (INT), treat minor and major dental problems (INT), perform procedures such as filling cavities, root canals, and the like (REF), and common procedures relating to dentistry, such as teeth cleanings. Dentists cannot prescribe medications, however.

## Disguise

This is the skill of assuming another identity. It is usually accomplished by changing one's clothes, putting on a wig, applying make-up, and so on (REF). The GM should make the skill roll for the player in secret, noting the total of the roll and using it as the difficulty number for Awareness rolls for anyone who scrutinizes the disguise.

## Driving (Spec)

Characters with this skill have practical experience operating ground vehicles, including performing manoeuvres in difficult conditions, avoiding obstacles, performing routing maintenance and operating all common equipment normally associated with them (such as climate control, radio, checking gauges, and filling the gas tank).

**Specialities:** Cars, Motorcycles, Tracked Vehicles, Tractors/Semis.

## Economics (Spec)

The study and knowledge of the production, distribution and consumption of goods. Characters with this skill understand the basics, such as the law of supply and demand, as well as advanced economic theory. This skill is more the science of economics than the knowledge of running a business. Characters with the Economics skill can act as advisors, researchers, and the like, though they may have no practical experience running a company (that would require the Business skill, above).

**Specialities:** Business, National, World.

## Electrician

Electrician is the skill of building, installing, maintaining, and repairing electrical devices and systems, such as those in computers, vehicles, environmental systems, buildings, and the like. Characters with this skill are able to effect repairs on, maintain and even rebuild items within their speciality (INT). The types of devices or equipment that a speciality will apply to depend on the technology level available in the campaign.

## Electronics (Spec)

Electronics is the skill of building, repairing and, maintaining electronic devices and equipment. Characters with this skill understand the principles of electronics and are able to diagnose problems occurring in electronic devices and fix them.

**Specialities:** Appliances, Comm, Security Systems, Weapons.

## Engineering (Type)

Engineering is the skill of designing, building, maintaining, and repairing systems. Characters with this skill are able to effect repairs on, maintain, and even rebuild items within their speciality (INT). The kinds of devices or equipment that a speciality applies to depends on the technology level available in the campaign.

This skill must be purchased separately for each type of engineering the player wishes his character to possess. Note that this is not the same skill as Combat Engineering.

**Specialities:** Architectural, Propulsion, Structural, Transportation.

## First Aid (Spec)

Characters with this skill know the basics of treating injuries, from scrapes and cuts to compound fractures (INT). The character knows how to reduce pain, stabilize broken limbs, and when not to move someone to avoid risk of paralysis, etc.

Note that this skill may reflect different knowledge, based on the particular setting and technology level of the game. A character in medieval Europe will not know CPR, for instance, but he can still use herbal remedies to heal minor burns, leeches to remove "bad blood," and so on. GMs may wish to rename this skill to better fit the setting (e.g., Chirurgery).

Successful use of this skill restores 1 Life point to the victim and stabilizes him, so that no further Life points are lost due to bleeding or other continued damage (see *Stabilizing*).

**Specialities:** Primitive, Modern.

## Fish and Game (Spec)

Characters with this skill are able to track and catch game and fowl, fish, and set traps. Depending on the prey, Fish and Game may involve cunning and wits to locate and trap one's prey (INT) or simple patience to wait for a bite (WIL).

**Specialities:** Hunting, Fishing, Trapping.

## Flexible Weapons (Spec)

Characters with this skill are adept at the use of chains, ropes (including lassos), and whips (including cat-o-nine-tails) as weapons. This skill is used when making attacks with such weapons, with or without a weapon attached to the end (REF). (See *Combat* for rules on making attacks, damage, and so on).

**Specialities:** Chains, Flails, Nunchaku, Ropes, Three-section Staves, Whips.

## Forensics

The skill of handling (REF) and analysing (INT) evidence. Evidence can include fingerprints, hair, fibres from clothing and carpet, and imprints (such as shoe and boot prints, tire tracks, and the like). Characters with this skill are able to identify the nature and origin of samples they analyse

The higher the effect number of the skill roll the more information is gleaned from the analysis. Consult the table below for suggested results of successful Forensics skill rolls:

EN	Results
0-2	Trivial details about the item (size and style of footwear, content of a fibre, calibre of a bullet, etc.)
3-5	Minor details about the item (manufacturer of an item, the source of a fibre—vehicle carpet, wool jacket, etc.; make of weapon)
6-8	Important details about the item (manufactured at a factory in Korea, custom made, made exclusively for Ford, specific model number of a firearm, etc.)
9-11	Crucial details about the item (date of manufacture, lot number, city where item was originally purchased, and so on)
12+	Every detail about the item (serial number, exact store where item was originally purchased, VIN number, all known owners of the item)

*Paul's character is analysing residue from an explosion. Paul gets an effect number of 7 on his Forensics skill roll, so the GM tells Paul that the residue is from an explosive compound manufactured solely for the U.S. military by a contractor based in Vermont. If Paul's effect number had been 9, the GM might have told him the date of manufacture and delivery point for the explosive, as well.*

## Forgery (Spec)

Characters with this skill are able to create remarkable forgeries of documents, seals and the like (REF). The total of the character's Forgery roll is used as the target number for Awareness checks made by anyone scrutinizing the forgery to detect its true nature.

The original being copied must be available to the character for an accurate copy to be made. If the original is not available, the character uses INT with the skill (because he is working from memory) and suffers a -6 penalty to the skill roll.

**Specialities:** Crests & Seals, Documents, Handwriting

## Gambling

Characters with this skill know how to play common games of skill, such as cards, backgammon, and the like (INT). In addition, characters can use this skill to cheat at games of chance (REF), such as dice and roulette.

If used for games of skill, use a simple contested Gambling roll for each player; the person with the best roll wins the game. If used to cheat at a game of chance, the total of the character's Gambling roll is used as the difficulty number for Awareness checks made by the other players to spot the cheat (i.e., to catch him in the act). If not caught, the cheater automatically wins. If both players are cheating, use a simple contested Gambling roll for each player; the person with the best roll wins the game), and allow both players an Awareness roll to try to catch the other cheating.

## Geography (Spec)

This skill covers knowledge of natural features of the earth, landmarks, climate, political, as well as cursory knowledge of the borders and inhabitants of the nations of the world. Characters with this skill can identify internationally known landmarks, the location of major bodies of water, the average climate and rainfall of a given country, and so on.

**Specialities:** Specific region or continent.

## Gunsmith (Type)

Characters with this skill are able properly maintain and effect repairs to firearms. In addition, the character can make minor modifications to the weapon, such as installing a custom mount or modifying the capacity of an ammunition magazine. The player must select a speciality when this skill is purchased. Knowledge of energy weapons allows the character to effect repairs to various energy weapons, including blasters, lasers, energy swords, and other high-tech or sci-fi weapons (Electronics may be used as complementary to this skill). Heavy weapons include all of the weapons in the Heavy Weapons skill group. Small arms include all of the weapons in the Small Arms skill group.

**Types:** Energy Weapons, Heavy Weapons, Small Arms.

## History (Spec)

Characters with this skill know a great deal about history and can recall general or specific details with a successful skill roll (INT). The more obscure the detail or more distant the subject from the character's locality, the higher the required difficulty of the roll is.

*Sir Thomas, having recognized a tapestry as belonging to Lord Culler, tries to recall information about the lord's family from history. The player makes a History skill roll for Sir Thomas and succeeds, so the GM tells the player that Sir Thomas recalls that Lord Culler died on the battlefield 20 years ago.*

**Specialities:** Locality, National, Organizational, World.

## Instruction

Characters with this skill are able to teach others, imparting wisdom and knowledge to their charges (PRE). Characters may instruct others in those areas which the teacher himself is trained. The maximum skill level a student may obtain from study is equal to the average of the teacher's Instruction skill and the skill being taught.

*Rourke has an Instruction skill of +4 and a Swords skill of +6. The average score of these two skills is 5, so the highest level he can train any student in Swords is a 5.*

Instruction is a Universal Skill; all characters receive it at level 2 at no cost.

## Instrument (Type)

Characters with this skill are adept at playing a musical instrument (REF). They also understand the finer points of musical expression (INT) and can appreciate instrumental performances more than the average person (PRE).

The specific instrument (or family of instruments, with the GM's permission) must be chosen when the skill is purchased.

Successful use of this skill means the character performs in a manner that moves or entertains the audience, or appraises the quality of instrumental performances by others. The effect number of the roll determines the quality of the performance; the higher the effect number the better the performance, and, thus, the better the audience's reaction.

This skill may also be used as a complementary skill to Persuasion in the appropriate circumstances (at the GM's discretion).

**Types:** Drums, Banjos, Flutes, Guitars, Harps, Horns, Keyboards, Violins, etc.

## Intel Analysis

Characters with this skill are able to analyse intelligence and determine the significance (if any) of details gleaned from it (INT).

An agent could use Intel Analysis to examine a satellite photograph of an air field to determine if any aircraft were loaded with nuclear warheads or had been recently moved. A soldier could examine a reconnaissance report from a scout to determine the quality of troops at an enemy base.

The quality and quantity of the data that the character has to work with determines the difficulty of the task.

A high-resolution satellite photo of a military base would provide a relatively low difficulty to determine what sort of base it was, whereas a smudged, rough sketch drawn by a child overlooking the base from a nearby hill would provide a very high difficulty for the skill roll.

## Interrogation

The skill of obtaining information from an unwilling subject. The interrogator may attempt to use subtlety, confusion, or mental trickery (INT), sympathy or intimidation techniques (PRE), or simply try to "wear down" the subject through repetition and extended duration (WIL). Physically beating a confession out of a subject is also possible (STR), though not legal in most civilized nations.

When interrogating a subject, a contested roll is made against the subject's WIL attribute roll. If the interrogator's effect number is greater than the subject's, then the subject has been broken and reveals the desired information.

## Intrigue

This skill is the art of uncovering (or covering up) secrets. A secret could be a love affair, a disreputable past, or a plot to overthrow the king. Intrigue can be used to oppose Deduction (but not Intuition) when trying to effect a "cover up" or otherwise conceal important or sensitive information from others, especially in a social setting (such as at the Royal Court, a meeting of Parliament or a formal ball or dinner thrown at an embassy). This skill may also be used as complementary to Conversation, Persuasion or other social skills (GM's discretion).

## Intuition

This is the character's ability to know or understand something without conscious reasoning. Intuition can tell a character when someone is being dishonest or deceptive, whether a door is safe to open or not, or whether to go out on a date with someone he's just met. In short, Intuition can help a character decide what choice to make when logic or perception fails him.

A successful roll should result in the player gleaning some vague direction from the GM about the person or thing in question. Responses such as "Something doesn't feel right" are appropriate but responses such as "You think the car will explode if you turn the ignition" are not. Intuition should not be used as a replacement for the Danger Sense Power.

The GM should prompt the player to make an Intuition roll any time he must make a choice that could have detrimental consequences. In addition, when the situation warrants it, the player may ask the GM "What does my character's intuition tell him?" The GM has the final discretion whether or not to allow the Intuition roll.

*Bob's character is a cop cruising the streets in his patrol car. He decides to stop at a convenience store to get a cup of coffee. As he pulls into the parking lot of the Mini-Mart at 45<sup>th</sup> and Tyler, he checks out the store as usual, but Bob fails his Awareness roll, so nothing looks out of the ordinary. At that point the GM asks Bob to make an Intuition roll. He succeeds and the GM tells Bob "As your character opens the door of his patrol car, he gets a bad feeling about the situation." Bob is no dummy. He takes the GM's hint and tells the GM that he's going to wait in the car a minute and re-examine the scene. Suddenly the dispatcher's voice comes over the police radio. "All units be advised, 211 silent in progress at the Mini-Mart, 45<sup>th</sup> and Tyler. No telephone response." Thanks to his intuition, Bob narrowly avoiding walking into a robbery in progress!*

## Jeweller

The skill of crafting fine jewellery from precious metals (silver, gold, platinum, etc.), stones and gems (REF). Characters can also appraise the quality and value of such items, create rings, necklaces, brooches, set stones, and so on (INT).

## Juggling

Characters with this skill are adept at juggling and balancing objects (REF), including heavy and unbalanced objects (STR). They also understand the finer points of these physical forms of entertainment (INT) and can appreciate such performances more than the average person (PRE).

Successful use of this skill means the character performs in a manner that wows the audience, or appraises the quality of such performances by others. The quality of a performance is determined by the effect number of the roll; the higher the effect number the better the performance, and, thus, the better the audience's reaction.

Examples of people with this skill include: Chinese acrobats, street entertainers and James Ernest.

## Knives

Characters with this skill are adept at the use and care of knives, dirks, and other small blades (REF). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

## Knowledge (Type)

Characters with this skill are knowledgeable about some specific subject. The player chooses the subject when the skill is purchased. The subject can be trivial or important in its scope. Most Knowledge skills are attached to the Mind group.

If knowledge skills involve the practical application of a skill, the character is also able to perform the task associated with it. A character may hold a job requiring the skill if the skill score is 3 or higher. Skill rolls for such skills may be associated with the BODY group or both the Body and Mind groups.

*Peter Parker has the Knowledge skill Photography at 4. Peter understands how to use a camera, take pictures, develop film, and—because his skill is a 4—can even hold a job as a newspaper photographer. When taking normal run-of-the-mill photos, the skill uses Peter's INT. If Peter is taking photos at a sports event or in the middle of a fight, he might use his REF instead. Then, when he's back in the photo lab, developing the pictures, any skill rolls there would likely use INT again.*

The GM is encouraged to develop different Knowledge skills, and to separate them as new, unique skills for his game or setting. Depending on the specific topic covered, a Knowledge skill may be considered as being a Type, a Speciality, or neither, at the GM's discretion. Knowledge skills can be renamed and even moved to a more appropriate Skill Group (or a newly created Skill Group), based on the GM's discretion and the setting or genre of the game. Knowledge skills should not be created that duplicate other existing skills, however.

*Matt is running a modern arcane magic game. Initially he creates the new skill KN: Arcana and KN: Arcane Research. After considering the new skills, he decides to rename "KN: Arcana" to "Arcane Lore." He also decides that "Arcane Research" is an unnecessary skill and that the existing "Research" will suffice, and that "Arcane Lore" can be used as a Complementary Skill with "Arcane Lore" for magic-related research. Matt adds "Arcane Lore" to his skill list in the*

**Suggested Types:** Civil Science, Cuisine, Family History, Humanities, Military Traditions, Mythology, Navy Ships, Wines, or any other general or specific topic that the GM approves.

## Language (Type)

Characters with this skill understand and can speak a foreign language. If the character is literate he can also read and write the language (does not apply to languages for which there is no writing system, such as traditional Navaho).

This skill must be purchased separately for each language that the character understands.

All characters start with a score of 3 in their native language (unless they have a trait that limits their starting score). The character's native language should be noted on the character sheet.

In addition to being used in skill rolls, the skill score represents the character's fluency with the language.

### Level Fluency

- 1 Rudimentary; simple words and phrases only. Thick, noticeable accent (obviously not a local).
- 2 Basic; simple conversations. Moderate accent (requires Average Awareness roll to detect).
- 3 Conversational fluency. Minor accent or regional dialect (requires Challenging Awareness roll to detect).
- 4 Fluent; complex dialogue and expressions. No accent.
- 6 Expert; speaks perfectly, better than most natives.
- 8 Master; command of the language rivals the most learned scholar (a rarity!).

Language (Type) is a Universal Skill; all characters receive it at level 3 for their native language at no cost.

The 20 most commonly used languages in the world (in alphabetical order) are: Arabic, Bengali, Cantonese, English, French, German, Italian, Japanese, Korean, Tamil, Telugu, Hindi, Malay / Indonesian, Mandarin, Marathi, Punjabi, Urdu, Portuguese, Russian, and Spanish.

## Lip Reading

The ability to discern what someone is saying by watching his mouth move, without hearing what he is saying (INT). A successful Lip Reading roll means the character using this skill understands most of what has been said, though not necessarily the context nor any emotion (or sarcasm). The character will have to determine the context of the message based on the circumstances (who is speaking to whom, what is being discussed, and so on). An effect number of 3 or higher will result in the character understanding everything said.

## Lock picking

Characters with this skill are proficient with picking locks and bypassing other simple mechanical security measures (REF). This skill requires a set of lock-picking tools to be effective; -3 if only improvised tools are available.

## Maces/Clubs (Spec)

Characters with this skill are adept at the use and care of maces and warhammers. This skill is used when making attacks with such weapons (REF). (See *Combat* for rules on making attacks, damage, and so on).

Maces/Clubs is a Universal Skill; all characters receive it at level 2 at no cost.

**Specialities:** Clubs/Bats, Maces, Mauls, Tetsubō, Warhammers

## Machine Guns (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of machine-guns and other automatic weapons (REF). The character selects a speciality for which the full skill level applies; all other types use the skill at one half level (rounding up). Heavy machine-guns include the Browning .30 cal., M2 .50 cal., and the Mk-19 grenade launcher. Light machine-guns include squad support weapons such as the M60, and M249 Squad Automatic Weapon (SAW).

**Specialities:** Anti-aircraft, Heavy, Medium, Light.

## Mathematics

The character has knowledge of mathematics (INT), including calculus, geometry, statistics, trigonometry and so on. The character is able to calculate mathematical formulae without the aid of a calculator or computer, given enough time (and, typically, something to notations, such as a pen and paper or chalk and a chalkboard). The use of a calculator, abacus, or other calculating device will provide a +3 to +9 bonus to the skill roll.

Mathematics is usually a complimentary skill to Physics and Chemistry.

## Mecha (Spec)

Characters with this skill have practical experience in power armour, or walking tanks depending on the mecha type they select. Combat tactics using the mecha and the surrounding terrain allows this skill to be used while piloting the mecha in offensive and defensive situations. Also adept in performing routine maintenance and pre-start checks, and operating all common equipment normally associated with them (such as climate control, radio, radar, and so on).

**Specialities:** Powered Armour, Light Mecha, Medium Mecha, Heavy Mecha, Assault Mecha, Utility Mecha, Transforming Mecha, Gesalt Mecha.

## Mechanics (Spec)

Mechanics is the skill of repairing and maintaining mechanical devices (INT), as well as diagnosing problems. When the skill is bought the player must select a speciality Characters with this skill can repair axles, motors, brakes, and so on.



(INT).

**Specialties:** Specific part or system (e.g., brakes, transmission, jet engines).

## Mimicry

With this skill, characters can mimic voices and other sounds (PRE). Some common applications of this skill include impersonating another person's voice, making non-human sounds (such as bird songs, cars or machine-gun fire), and so on. Mimicry can be used either as a ruse or for entertainment.

Mimicry can be used as a complementary skill to Acting (for impersonating a specific person) and to other Social skills (at GM's discretion).

## Missile Launchers (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of large guided missiles and missile launching systems (INT). The character selects a speciality for which the full skill level applies; all other types use the skill at one half level (rounding up).

(Note: Although some modern anti-tank weapons are guided by radio or wire controls, these are governed by the Portable Launchers skill.)

**Specialties:** Anti-aircraft, Cruise Missiles, ICBMs, Orbital Platforms.

## Navigation (Spec)

Characters with this skill are able to determine their approximate position on a map, tell the time of day or night (by the sun or stars), and plot a course between two known points (INT). Navigation may be used as a complementary skill to Survival, Fish and Game, Sailing, Water Craft and other skills with GM's permission. For navigating in space, between and within star systems, see the Astrogation skill. This skill is common among professional trackers, rangers, scouts, soldiers and sailors.

**Specialties:** Land, Sea.

## Negotiation (Spec)

Characters with this skill are adept at reaching compromises and relaying information without offending the recipient. Negotiation is an important skill for envoys, diplomats, politicians, and police crisis negotiators.

When engaged in negotiations, the character states his goal (or demand) and makes a Negotiation roll against a Target Number set by the GM. The difficulty number is based on the other's party's general reaction to the character's stated goal (see the table below).

Reaction to Demand/Goal	Base Difficulty
Adamantly opposed (e.g., to the death)	Legendary (TN 30)
Generally opposed	Extreme (TN 27)
Somewhat opposed	Demanding (TN 24)
Apathetic, unimpressed	Difficult (TN 21)
Somewhat agreeable	Challenging (TN 18)
Generally agreeable	Tricky (TN 15)
Enthusiastically agreeable	Average (TN 12)

The target number represents the difficulty for the negotiator to achieve his stated goal while also making several concessions to the other party.

If the effect number of the Negotiation roll is 3 or higher, then the negotiator need make only one concession. If the effect number of the Negotiation roll is 6 or higher, the negotiator achieves his goal without making *any* concessions.

Effect Number	Agreement with...
0-2	Several concessions
3-5	Only one concession
6+	No concessions

It is up to the negotiator (or perhaps his superior) to decide if the final offer is acceptable. If so, the agreement is made and the deal struck. If not, then the negotiations are called off, at least for this round.

*Mark is playing Mssr. Armonde, a nobleman in a Musketeers game. Mssr. Armonde is negotiating with a local lord for the release of his daughter, who is currently a "guest" (i.e., hostage) at the lord's estate. The lord is demanding a sum of money and a portion of Mssr. Armonde's land in return for his daughter's release (i.e., two "concessions"). Mark tells the GM that his goal is the release of his daughter. The GM determines that this is something that the lord is somewhat opposed to (the lord is willing to release the daughter if his demands are met, after all) and sets the difficulty of the Negotiation roll at Demanding (TN 24). Mark makes a Negotiation roll and gets a 28, for an effect number of 4. Mssr. Armonde's EN of 4 means the lord agrees to release the daughter in return for but one concession from Mssr. Armonde. The GM decides that the lord is willing to forgo the demand for land and instead will settle for the sum of money to secure her release. Mssr. Armonde agrees. He pays the lord the money and his daughter is released.*

Negotiations may last from several minutes to several months, depending on their nature and other factors, including the method of communication, and so on. It is up to the GM and the players to determine how much of the negotiations are covered by the skill roll. A Negotiation skill roll can represent the entirety of the negotiations, a single round of negotiations or each individual “point” of a negotiation.

This resolution system is intentionally abstract. A “concession” represents any reasonable demand or condition made by the other party that the negotiator can meet. If it is important to know the exact nature of the concessions, the GM should consider forgoing the skill roll altogether and simply role-play the negotiations in the game.

Diplomacy represents the skill of negotiation between nations or large organizations, Hostage negotiation is the skill of negotiating with hostage-takers, and Political negotiation is the skill of negotiation among or between politicians.

**Specialties:** Diplomacy, Hostage, Political.

## Operate Electronics (Spec)

Characters with this skill can operate electronic communication and sensor equipment, including both military and civilian versions, and those aboard vessels, portable and stationary devices, and so on. Characters can also maintain and make minor, emergency repairs to such devices, though any complex repairs will require the Electronics skill.

A successful skill roll also allows the user to detect objects using sensor equipment, such as sonar and radar. Operate Electronics can also be used to try to jam sensors as with jamming communications.

Attempts to jam communication equipment requires a contested skill roll, with both sides using the Operate Electronics skill. If one side has more advanced or powerful technology, the GM may allow a bonus of +1 to +5 to that side's skill roll. The side with the higher Effect Number wins the contest.

**Specialties:** Communication, Sensors.

## Orate (Spec)

This is the skill of effectively communicating ideas and inspiring or moving an audience's emotions with the spoken word. Characters with the Orate skill know how to tell stories, issue commands, present information (such as news), give speeches, tell tales and otherwise inform (INT), entertain or motivate (PRE) listeners. Orate could also be used to kill time or bore someone to death (WIL).

Orate can be used as a complementary skill to Acting and Poetry (for monologues and one-person performances), Strategy (for leading and inspiring troops in battle) and Persuasion.

**Specialties:** Bard, Command (i.e., leadership), News Reporter, Speeches.

## Para (Spec)

Characters with this skill can use various types of paraflight apparatus, including hang gliders, parachutes and paragliders (REF).

**Specialties:** Hang Glider, Parachute, Paraglider.

Parachutes slow the descent of falling characters. A character must fall at least 10 meters or at a velocity of 10 meters per second before the parachute may be deployed. If the parachute is deployed sooner, the parachute will become entangled and rendered useless on a roll of 9+ on 3d6. Modern models can be equipped with an Automatic Activation Device (AAD), which automatically deploys the chute if the wearer exceeds a velocity of 45 meters per second or falls below a pre-set altitude (usually 1,000 meters).

A successfully deployed parachute will slow the wearer's descent. The wearer's velocity slows from his current velocity (when the chute is deployed) to “parachute velocity” in one turn (3 seconds). Parachute velocity is 10 meters per turn (about 7 miles per hour), so a character falling while wearing a parachute is assumed to have a MOV of 10 until he or she reaches the ground.

Most parachute rigs incorporate a back-up rig.

Deploying a back-up chute requires a Para (or Athletics) skill roll (TN 12). Failure indicates that the back-up chute is also rendered useless and the character will continue to fall normally.

A free-falling character can increase or decrease his terminal velocity with a successful Para skill roll (TN 15). A free-falling character can increase his terminal velocity by as much as three times (effectively taking a “Sprint” move while diving) by assuming a diving position, or decrease his terminal velocity by one third (to 40 meters per second) by assuming a “spread eagle” position.

Consult the table below to determine how far from the target landing spot the character lands. A successful Para skill roll is required to land near the target landing zone (“LZ”). A successful Para skill roll (TN 18) is required to land near the target landing zone (“LZ”).

Para EN	Distance from LZ
-6 or less	1d6x5 kilometres
-3 to -5	1d6 kilometres
-1 to -2	1d6x100 meters
0	1d6x10 meters
1 to 3	1d6x5 meters
4 to 6	1d6 meters
7 or more	Exact target hex

**Emergency Parachute:** A standard round canopy-styled parachute, used for emergency jumps, dropping cargo, and so on. Emergency parachutes can be “steered” only moderately.

**Para-sail:** A para-sail uses a rectangular canopy and can be controlled more than a standard emergency parachute. A para-sail can be “steered” better and the velocity can also be controlled as if the character were in free-fall (see above). A para-sail grants the user a +6 bonus to the Para skill roll for landing on target.

## Persuasion (Spec)

This is the skill of using one's voice, logic, expression, body language, or some combination, to influence others. Persuasion can be in the form of an intimidating glare, a boastful challenge, batting one's eyes (seduction), stroking a cheek (consolation), grasping the handle of one's sword in a threatening manner, or invoking the name of one's superior (or even God).

The character makes a contested Persuasion roll against the subject's WIL + Concentration roll. If the character's roll is higher than the person he is trying to persuade, then he is successful. The other person sees things the persuader's way (at least to some degree) and will act accordingly.

The GM should allow skills appropriate to the situation to be used as complementary to the Persuasion roll. A character may also add one half of his Fame or Infamy score to the roll, if appropriate (GM's discretion). The GM may also award a bonus of +1 to +3 to the player's roll for good role-playing.

*Tim's character, Harcourt, is confronted by a would-be robber who has demanded Harcourt's purse. Harcourt grasps his sword handle, telling the robber "If you value your life, sir, get thee back. Retreat or I will run you through and leave you to be devoured by dogs, so help me God!" The GM gives Tim a +2 bonus to the Persuasion roll for good role-playing. Tim makes a Persuasion roll and adds the +3 bonus, for a total of 24! The GM makes a Persuasion roll for the robber, totalling 17. The robber is "persuaded" not to accost Harcourt and, in fact, runs for his life!*

**Specialities:** Bribery, Fast Talk, Intimidation, Propaganda, Romance, Seduction.

## Pharmacology

Pharmacology is the science of drugs, especially as they relate to medicinal use. Characters with this skill are able to identify drugs and their medicinal effects, reactions, and properties (INT).

## Philosophy

This is the skill of philosophical theories, discussion and debate, covering such topics as "What is the meaning of life?" "Is there a God?" "What is mankind's greatest error?" and the like (INT). Philosophy also includes knowledge of theology and thus can be complementary to the Religion skill.

## Photography

The skill of taking photographs of various subjects (REF) and developing them from film to print (INT). Also adept at using digital capture and media and is knowledgeable in the differences between film and digital photography. Use of this skill to take pictures requires a camera, and developing film requires access to a film lab, with the proper chemicals, photosensitive paper, and possibly other equipment.

## Physician (Spec)

Characters with this skill are proficient in the arts of healing the body. Successful use of this skill allows the character to diagnose symptoms (INT), treat minor and major wounds (INT), perform minor, out-patient surgeries (REF) and common procedures relating to his speciality, as well as identify and prescribe drugs and remedies available in the campaign (INT).

To perform complex and major surgeries the character should buy the Surgery skill.

This skill is common among physicians, EMTs, combat medics, and corpsmen.

**Specialities:** General, Neurology, Oncology, Paediatrics, Podiatry, Psychiatry, or any other speciality approved by the GM.

## Physics (Spec)

The character has knowledge of physics and the laws of nature, including kinetic energy, the effects of gravity on mass, and so on (INT). The extent of the character's knowledge will depend on the era in which the game is set. The skill score reflects the depth of knowledge possessed by the character relative to the whole body of knowledge available in the current era.

Mathematics is usually a complimentary skill to Physics.

A speciality must be selected for this skill when it is bought. This skill may be bought more than once, each time for a different science.

**Specialities:** Astrophysics, General, Nuclear, Quantum, or any other speciality approved by the GM.

## Piloting (Spec)

Characters with this skill have practical experience piloting aircraft, including performing manoeuvres in difficult conditions, dog fighting, aerial acrobatics, performing routing maintenance and pre-flight checks, and operating all common equipment normally associated with them (such as climate control, radio, radar, and so on).

**Specialities:** Grav-vehicles, Helicopters, Jets, Planes, Vectored Thrust.

## Pistols

Characters with this skill are adept at the use (REF) and maintenance (INT) of modern handguns, regardless of the type of action of the weapon (i.e., revolver, semi-automatic). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

In addition to firing a weapon, this skill can be used to reduce the time needed to reload one or to clear a jam. The normal rate for reloading a revolver cylinder with loose rounds is 2 rounds per turn. Reloading a semi-automatic pistol (i.e., exchanging an empty magazine for a full one) or reloading a revolver using a speed-loader takes 1 turn. The standard rate for reloading an empty magazine is 1 round per turn. With a successful Challenging REF attribute roll (TN 18), the character can load a number of rounds into a magazine or cylinder per turn equal to his REF, or reload a semi-automatic weapon with a fresh magazine (or a revolver with a speed-loader) and fire the weapon in the same turn.

## Poetry

Characters with this skill are adept at composing (INT) and reciting poetry (PRE). They also understand the finer points of poetic expression and can appreciate poetic recitals more than the average person (PRE).

Successful use of this skill means the character performs in a manner that moves the audience (PRE), or appraises the quality of such writing or performances by others (INT). The effect number of the roll determines the quality of the performance; the higher the effect number the better the performance, and, thus, the better the audience's reaction.

This skill may also be used as a complementary skill to Persuasion in the appropriate circumstances (at the GM's discretion).

## Polearms (Spec)

Characters with this skill are adept at the use and care of polearms, including spears, lances, halberds and glaives (REF). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

**Specialities:** Halberds, Pikes, Lance/Great Spear.

**Specialities:** Glaives/Halberds, Spears, Lances, Ōno, Pikes, Staves.

## Politics

Politics is the study of the processes, principles, and structure of government and of political institutions. Characters with this skill are familiar with government and the governing of a political entity, such as a nation or municipality, as well as the administration and control of its internal and external affairs (INT). Characters with this skill understand the procedures and rules of government, how to conduct a government meeting, draft bills and pass them into law, and how to engage in political debate (PRE). Characters also know how to garner and maintain public support, how to manipulate public opinion (PRE) and how to present information in the best possible light or to misrepresent information to avoid a scandal (INT).

Politics is an important skill for members of government (politicians), lobbyists, and even some special operations forces (such as counter-insurgents) and CIA operatives.

Orate can be used as complementary to this skill.

## Portable Launchers (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of portable grenade, anti-tank weapons (such as the TOW, Dragon, and M-72 LAW), grenade launchers (such as the M-79, M-203) and mortars (REF).

**Types:** Grenade launchers, Anti-tank Weapons, Mortars.

## Professional (Type)

This skill represents a skill (or set of skills) for a specific profession not otherwise represented in the skill list. Characters with the Professional skill are able to do the job and operate any equipment normally associated with the profession. As with all skills, the higher the skill score the better the character is at his job.

Some professions may require special tools or equipment to perform adequately. The GM should determine if a given profession requires tools or not.

Professional (Type) is a Universal Skill; all characters receive it at level 2 at no cost. A Type must be selected for the skill.

**Types:** Specific career (attorney, farmer, fire-fighter, fisherman, page, police officer, rancher, soldier, student, weaver, etc.)

## Psychology (Spec)

The character has knowledge of human behaviour and the conscious and subconscious mind, including effects of abuse, the effects of mood disorders, and so on (INT). The extent of the character's knowledge will depend on the era in which the game is set. The skill score reflects the depth of knowledge possessed by the character relative to the whole of knowledge available in the current era.

A speciality must be selected for this skill when it is bought. This skill may be bought more than once, each time for a different science.

**Specialities:** Alien (species), Animal, Behavioural, Criminal, Counselling, Profiling, or any other speciality approved by the GM.

## Religion (Type)

Characters with this skill are knowledgeable in the history, traditions, tenets and ceremony of major religions (INT). When this skill is purchased, the character must specify one primary religion to which the skill score applies.

*Sir Thomas has the skill Religion (Christianity) +5. He has a skill of +5 with his speciality (Christianity) but no practical knowledge of other major religions.*

Religion may be used as a complementary skill to other applicable skill rolls (GM's discretion). For example, the GM should allow Religion to be used as complementary to a Philosophy roll if the character is involved in a religious debate.

**Types:** Christianity, Islam, Judaism, Paganism, Wicca or any other religion allowed by the GM.

## Research (Spec)

The skill of researching a topic (a person, place or thing, such as a rare artefact, an event or a ship) to discover clues, evidence or general or detailed facts about it. Sometimes research is simply a matter of locating where something is supposed to be, such as when looking for a known book in the library (INT). In other instances one must perform tedious research to find "the answer," such as when looking for an obscure passage in a huge tome with no index (WIL).

Research can be accomplished on the Internet, in a library, a laboratory, in a newspaper morgue, a corporate Human

Resources office, floating city computer network, or wherever the GM thinks is reasonable and appropriate for the character to conduct the research. Remember, too, that sometimes getting into the place can be a task in and of itself! The higher the effect number, the more information is gleaned about the topic.

**Specialities:** Internet, Library, Medical, Publications, Records, Scientific.

## Riding (Spec)

Characters with this skill are able to ride domesticated beasts, manage tack and bridle, and perform simple care and grooming of their animals. A speciality must be selected when the skill is purchased. This skill may be purchased more than once, each time for a different speciality

**Specialities:** Camels, Horses, or other beasts allowed by the GM (such as dragons, wolves, giant bugs, and so on).

## Rifles

Characters with this skill are adept at the use (REF) and maintenance (INT) of modern rifles, regardless of the type of action of the weapon (i.e., lever-action, semi-automatic, bolt action). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

In addition to firing a weapon, this skill can be used to reduce the time needed to reload one or to clear a jam. The normal rate for reloading a bolt action or lever action rifle is 1 round per turn. Reloading a semi-automatic rifle (i.e., exchanging an empty magazine for a full one) takes 1 turn. The standard rate for reloading an empty magazine is 1 round per turn. With a successful Challenging REF attribute roll (TN 18), the character can load a number of rounds into a magazine or weapon per turn equal to his REF, or reload a semi-automatic weapon with a fresh magazine and fire the weapon in the same turn.

## Shadowing

The skill of following others without being seen (INT). Characters with this skill are able to keep a target within site while walking or driving behind him, while remaining inconspicuous and remaining unnoticed. The GM should require characters using this skill to make periodic skill rolls, with the frequency and difficulty based on the environment and the shadowing character's chances of "blending in."

*Charlene is playing Veronica X, an international secret agent. She is following her target through a crowded market in Cairo. The GM decides that a busy market in Cairo is pretty easy to hide in but Veronica X is a blonde and she is wearing her trademark black latex jumpsuit (so she stands out just a tad). The GM decides that Veronica must make a Difficult Shadowing skill roll (TN 21).*

If the skill roll fails, then the subject gets a Tricky Awareness roll to notice the character. If the character being followed is actively watching for anyone following him, have both characters make a contested Shadowing versus Awareness roll. The character with the higher effect number wins the contest.

## Shotguns

Characters with this skill are adept at the use (REF) and maintenance (INT) of modern smooth bore shotguns, regardless of the type of action of the weapon (i.e., breech-loaded, pump-action, semi-automatic). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

In addition to firing a weapon, this skill can be used to reduce the time needed to reload one or to clear a jam. The normal rate for reloading a shotgun is 1 round per turn. With a successful Challenging REF attribute roll (TN 18), the character can load 2 rounds into a magazine per turn.

## Singing

Characters with this skill are adept at singing (HLT). They also understand the finer points of artistic expression (INT) and can appreciate singing performances more than the average person (PRE).

Successful use of this skill means the character performs in a manner that moves or entertains the audience (HLT), or appraises the value of song writing or performances by others (INT). The effect number of the roll determines the quality of the performance; the higher the effect number the better the performance, and, thus, the better the audience's reaction.

This skill may also be used as a complementary skill to Persuasion in the appropriate circumstances (at the GM's discretion).

## Sleight of Hand

Characters with this skill can lift items from others, misdirect viewers' eyes, and conceal items or cut purses and the like (REF). When a character uses Sleight of Hand against another, use a simple contested skill roll of the character's Sleight of Hand versus the subject's Awareness. If the subject's Awareness roll beats the Sleight of Hand roll, the other person has caught him in the act, knows which shell the ball is under, or otherwise wins the contest.

## Sling Weapons (Spec)

Characters with this skill are adept at the use (REF) and maintenance (INT) of sling weapons. This skill is used when making attacks with such weapons (see *Combat* for rules on making attacks, damage, and so on), or to hurl missiles great distances (STR).

**Specialities:** Atlatl, Bolas, Simple Slings.

## Slingshots

Characters with this skill are adept at the use (REF) and care (INT) of slingshots. This skill is used when making attacks with such weapons (see *Combat* for rules on making attacks, damage, and so on), or to fire small missiles great distances (STR).

## Smith (Spec)

The skill of forging and crafting items from metal (bronze, iron or steel, depending on the period and technology level of the setting or culture).

Weapon smith is the skill of creating bladed weapons, such as knives, swords, spearheads, arrowheads, and the like. The creation of handles and shafts requires woodworking (a speciality of the Craft skill), although if the character has access to these finished items he can complete the weapon in question.

Blacksmith is the skill of creating metal tools (such as hammers), blunt weapons, horseshoes and the like.

**Specialities:** Armourer, Blacksmith, Weapon smith

## Society (Type)

Characters with this skill are familiar with a particular sub-culture, whether through direct interaction or some vicarious experience. This knowledge extends to important or well-known personalities, tastes in music and fashion, language (slang and/or dialects), as well as popular social spots and important businesses, and the like. For example, characters with Society (Courtier) know the finer points of court etiquette and the proper behaviour for ladies and gentlemen. This is a critical skill among courtiers, diplomats and nobility.

A specific sub-culture must be chosen when this skill is purchased. This skill may be bought more than once, each time for a different sub-culture.

A success means the character acts appropriately (+3 all social skill rolls for the rest of the event) or gains one important piece of information from interaction with one or more members of the group. An effect number of 6 or higher means the character is noticed and gains the special attention of one or more important figures in the group (+3 to all social skill rolls for the rest of the event, or the GM may role-play some special result at his discretion).

*Erin is playing Adrienne, a commoner, in a Victorian Era game. Adrienne is masquerading as a noblewoman at a formal ball. As she mingles with the guests, trying to be accepted as one of them, the GM tells Erin that she must make a Difficult Society (High Society) roll (TN 21). Erin rolls and gets a total of 27! Because Adrienne's roll was 6 points higher than the required TN, the GM decides that she has gained special attention. He tells Erin that not only has Adrienne been accepted and performed as expected by the other guests, she has gained the notice of the Duke of Effingham, who invites her to dine with him!*

A failed roll means the character has failed to gain any useful information or has made some simple, but forgivable, mistake (-3 to all social skill rolls for the rest of the event). A roll that fails by 6 or more (i.e., a skill roll total that is less than TN-6) means the character has made some major gaffe, insulting the host or other dignitary at the function. The GM should determine an appropriate consequence of the character's *faux pas*. The character may have gained an enemy, been challenged to a duel, been captured by a press gang, or been mugged in an alley. In cases of a very low roll resulting in failure (e.g., 9 less than the TN), the GM can simply assign an amount of injury for the mishap (e.g., 1d6 B/S damage) or run the event as an encounter; perhaps with the intervention of the other PCs. The latter approach could easily lead to an adventure unto itself.

*In the same situation, Erin rolls below an Average success, three levels below the required Difficult success. Disastrous! The GM decides that not only has Adrienne been exposed as a fraud, the Duke of Effingham is particularly offended and orders her to be arrested and placed in gaol!*

The GM is encouraged to modify the Target Number of the roll based on circumstances.

Society may be used as a complementary skill to most, if not all, social skills, including Persuasion, Politics, and Conversation.

**Types:** Corporate, Courtier, High Society, Military, Streetwise.

## Spacecraft (Spec)

Characters with this skill have practical experience piloting interplanetary and interstellar craft, including performing manoeuvres in difficult conditions, dog fighting, performing routine maintenance and pre-flight checks, and operating all common equipment normally associated with them (such as climate control, radio, sensors, and so on).

**Specialities:** Capital Ships, Cargo Ships, Starfighters, System Boats, Space Shuttles, International Space Stations.

## Sport (Type)

Characters with this skill are adept at organized athletic activities not already covered by other skills. Skills not covered by this ability include Archery and Swimming. The character knows the rules of the game (INT) and can compete in the sport. Some sports involve primarily stamina, such as long distance running (HLT), or strength, such as power lifting (STR). Most sports are predominantly agility-based, however, such as bowling, baseball, cricket, and similar sports (REF).

A Type must be selected when the skill is purchased. This skill may be purchased more than once, each time for a different type.

**Types:** Baseball, Basketball, Bowling, Cricket, Football, Hockey, Soccer, or other sports allowed by the GM.

## Bicycling

A character on a bicycle may move twice his regular Movement attribute as a standard action and six times his regular MOV while sprinting. A character on a speeding bike may jump across 1 meter (3ft) of horizontal space (from cliff-face to cliff-face, for example) per 3 points of Effect Number scored on a Sport(Cycling) check.

## Roller-skating/blading

A character wearing roller-skates or Rollerblades may move twice his regular MOV as a standard action and five times his regular MOV as a full-turn action, provided he's on a fairly hard, flat surface. Moving across rough terrain while wearing skates or Rollerblades drops a character's movement rate to cautious movement per turn.

A character wearing skates or 'blades while on a downhill slope may move seven times his regular MOV as a full-turn action with a successful Sport(Roller-skating) check. A character on a fast-moving skates or blades may jump across 1

meter of horizontal space (from cliff-face to cliff-face, for example) per 3 points of Effect Number on a Sport(Roller-skating) check.

## Skateboarding

A character riding a skateboard may move his regular MOV as a standard action or his running MOV as a full-turn action, provided he's on a fairly hard and flat surface. On a downhill slope, he may move six times his regular MOV as a full-turn action with a successful Sport(Skateboarding) or Reflex Attribute Save.

A character on a fast-moving skateboard may jump across 1 meter (3ft) of horizontal space (from cliff-face to cliff-face, for example) per 3 points of Effect Number scored on a Sport(Skateboarding) check.

## Skiing

A character moving cross-country on skis may move effortlessly across snow, ice, and similar conditions that would impede ordinary walking. A character skiing cross-country may move his full ordinary MOV as a standard action, or running speed as a full-turn action. A character skiing downhill may routinely travel at a speed of 15 to 30 kph (20-40 mph) with little effort, depending on the slope he's riding. When skiing carefully, a character may move 1 m per turn per the Effect Number of a Sport(Skiing) check. When skiing swiftly, a character may move 2m per turn per EN of a Sport(Skiing) check. While skiing all-out, a character may move 3m per turn per EN of a Sport(Skiing) check.

Failure of a Sport skill roll while skiing swiftly or all-out will result in a mishap, dealing 4d6 Blunt/Stunning damage to a swift skier and 7d6 Blunt Stunning damage to an all-out skier.

A character skiing downhill may only turn in a limited fashion, dictated by the GM and the nature of the slope he's speeding down.

## Surfing

A character "paddling" atop a surfboard may move at half his MOV attribute as a full-turn action. A character riding a wave may, as a full-turn action, move 1m per Effect Number on a Sport(Surfing) check in a moderate wave or 2m per EN in a large or fast moving wave.

## Stealth

This skill is used to hide oneself in shadows and move silently. The total of the Stealth roll is used as the difficulty number for Awareness checks made by anyone who may spot the character (whether actively searching or otherwise, as the situation dictates).

*Diane's character Renee is trying to follow a man through the streets of London, without herself being seen by him. Diane makes a Stealth roll, for a total of 18. When the GM makes a Awareness roll for the man to notice Renee, his difficulty number will be 18.*

This skill can also be used to hide items up to and including large animals, such as horses. A single roll is made by the GM. The effect number of the roll is used as the difficulty number for Awareness checks made by anyone searching for it.

*Renee has ridden her horse into the woods to escape several pursuers. Thinking that she can escape notice if she hides her horse, she rides into the brush, dismounts, and attempts to conceal herself and her horse. The GM makes a Stealth check, for a total of 20. When the GM makes Awareness rolls for the pursuers to spot Renee, their difficulty number will be 20.*

Stealth is a Universal Skill; all characters receive it at level 2 at no cost.

## Strategy (Spec)

Characters with this skill are skilled at managing multiple units in large, battle-sized engagements (usually of more than 100 soldiers per side). They can assess a battle, locate advantageous routes of advance (or retreat), determine the best place to establish a defence, and so on (INT). Successful use of this skill by the leader of an army gives his side an Initiative bonus of +1 for every two points of Effect Number. The bonus lasts for the duration of the battle (PRE). GMs may also wish to use this skill as a contested skill roll between commanders.

**Specialities:** Land Battles, Logistics, Sea Battles, Sieges, Space Battles.

## Style

This skill covers knowledge of the latest styles and fashions, fashion design, and presentation. Characters with this skill can keep up with the latest fashion trends, identify the origin (region or designer) of fashion styles, design new fashions and coordinate fashion shows.

Style can be used as complementary to certain social skill rolls (GM's discretion).

## Sub-machineguns

Characters with this skill are adept at the use (REF) and maintenance (INT) of modern submachine-guns. This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

In addition to firing a weapon, this skill can be used to reduce the time needed to reload one or to clear a jam. The normal rate for reloading a submachine-gun (i.e., exchanging an empty magazine for a full one) is 1 turn. The standard rate for reloading an empty magazine is 1 round per turn. With a successful Challenging REF attribute roll (TN 18), the character can load a number of rounds into a magazine or cylinder per turn equal to his REF, or reload a weapon with a fresh magazine and fire the weapon in the same turn.

## Surgery (Spec)

Characters with this skill are able to perform surgical procedures. It includes knowledge of barbering and surgery in low-tech settings (INT). Successful use of this skill allows the character to perform minor to complex surgeries.

This skill is common among surgeons and paramedics.



**Specialities:** Cosmetic, Emergency, Neuro/Brain, Oral, or any other speciality approved by the GM.

## Surveillance (Spec)

The skill of watching and gathering information about a target (INT). Characters with this skill know how to set up an observation point, observe a subject and record information concerning the subject's movements and actions, without being themselves observed (it is similar to the Shadowing skill, but does not involve moving and following the subject).

Police detectives, private investigators, covert intelligence operatives, snipers and soldiers assigned to reconnaissance missions or observation posts, most often possess this skill.

Can be used as complementary to Awareness skill rolls in appropriate circumstances (GM's discretion).

**Specialities:** Bugging, Reconnaissance, Stakeouts, Stalking.

## Survival (Spec)

Characters with this skill are able to survive off the land (INT). They know which plants are edible, how to construct shelter, where to find fresh water, and the like. Even recreational campers may have some measure of this skill (e.g., a score of 1 or 2, or even higher for an avid camper).

A successful check means the character is able to survive in the wilds for a day, with food, water and shelter. A critical success extends this time to a week. A failed check means the character's efforts are insufficient for the day; he goes hungry and thirsty, is exposed to the elements, or what have you. A roll that fails by 6 points worse (i.e., an EN of -6 or lower) means the character has suffered some mishap. The mishap could be an accidental poisoning, an injury inflicting 1d6 damage, frostbite, or any other situation at the GM's discretion.

**Specialities:** Arctic, Desert, Temperate, Tropical, Water.

## Swimming

Characters with this skill are able to swim in water deeper than waist-level (REF) and can stay afloat for long periods of time (HLT). No skill roll is needed to tread calm water. Rough water, however, requires the character to make a skill roll to keep his head above water each turn (STR). Failure means the character has gone under and may be subject to drowning if a character cannot resurface on the subsequent turn by making a successful Swimming roll (see *Asphyxiation and Drowning*).

This is an important skill for sailors, competition swimmers, Navy SEALs, and the like.

A character may ordinarily swim at one-quarter of his MOV as a standard action or at one-half his Movement attribute as a full action. A Swimming skill roll will be necessary for each turn of swimming movement in A character may also swim *all-out*, "sprinting" as competitive swimmers do. This is an extremely tiring form of movement, suited only for short distances. Swimming all-out requires a full-turn action, and allows a character to move his full Movement attribute in meters. This pace may be maintained only as long as the Sprint rules allow.

Each turn thereafter, the character must make a Health Attribute Save against a TN of 15 (rising by 1, cumulatively, for each additional turn of all-out swimming) to continue. Failure means that the character will become fatigued. Note that some powers could make this skill redundant, however if a neutralize power is used against an aquatic themed character, they may find themselves requiring to tread water.

## Swords (Spec)

Characters with this skill are adept at the use and care of swords, including cutlasses, sabres, epee, foils, and other medium-length bladed weapons (REF). This skill is used when making attacks with such weapons. (See *Combat* for rules on making attacks, damage, and so on).

**Specialities:** Foils/Epee, Long swords, Kenjutsu, Machetes, Rapiers, Sabres, Short swords, Two-handed Swords

## Symbols (Type)

This skill represents the study and recognition of symbols. Characters with this skill are familiar with the various family, governmental and corporate crests, banners and devices (INT). A character making a successful Symbols skill roll will recognize the owner (individual, family, organization or nation) to which a symbol or other device belongs. The GM may subject the roll to a +3 to -3 modifier, depending on how well-known or obscure the symbol is in the local area.

*Sir Thomas sees a regal crest on a tapestry in the market. Sir Thomas' player wishes to identify the owner of the crest and tells the GM so. The GM has the player make a Symbols (Heraldry) check for Sir Thomas, with a +3 to the skill roll because the GM knows the crest is that of a lord who lives some distance away.*

**Types:** Arcane & Occult Symbols, Corporate Logos, Heraldry, Naval Flags, Runes.

## Tactics (Spec)

Characters with this skill are skilled tacticians and are able to lead small units with 100 soldiers or fewer. The character can assess an engagement, locate advantageous positions, determine the best place to establish a defence or execute an ambush, and so on (INT). Successful use of this skill by the leader of a group of combatants also affords an Initiative bonus to that side for the duration of the battle (PRE). GMs may also wish to use this skill as an opposed test between commanders.

**Specialities:** Ambushes, Close Quarter Battle (CQB), Defensive Positions, Patrolling, Skirmishes.

## Teamster (Spec)

The skill of driving teams of domestic beasts, usually to pull a wagon. The character also knows how to manage harness and bridle, and so on. A speciality must be selected when the skill is purchased. This skill may be purchased more than once, each time for a different speciality

**Specialities:** Camels, Horses, or other beasts allowed by the GM (such as dragons, wolves, giant bugs, and so on).

## Throwing (Spec)

Characters use this skill to throw objects, such as rocks and stones, for accuracy (REF) or distance (STR). (See *Combat* for rules on making attacks, damage, and so on). It can be used to throw a grappling hook, toss a weapon to a friend, to play darts, or to hurl a spear at an opponent.

Throwing is a Universal Skill; all characters receive it at level 2 at no cost.

**Specialities:** Darts, Football, Javelin, Knives, Stones, et al.

## Tracking

Characters with this skill are able to track both man and beast (INT). Unlike Fish and Game, which allows one to locate fresh game and fowl, Tracking is used to follow prints made by man or beast, either fresh or old. Successful use of the skill means the character is able to identify the maker of the tracks and to follow them for one day or to a point at which the conditions have changed (e.g., tracks leading through a forest and to a river). If at this point the subject has not been found, then a new Tracking roll must be made to continue.

## Trading

Characters with this skill are adept at negotiating a mutually agreeable price for a service or goods. Trading is an important skill for merchants, traders, service providers, and business owners of all kinds.

Either the buyer or seller can initiate a negotiation. When negotiating a price, the buyer and the seller make contested Trading rolls (use just WIL + 3d6 if a character does not possess the Trading skill). The winner gains a 5% advantage to the base (list) price for each point of difference between the winner's and loser's effect number. This represents the "best, final offer." It is up to the loser to decide if this "final offer" is acceptable. If so, the agreement is made and the sale made. If not, then the transaction is called off.

*Lou is playing space marine Corporal Darren Newman in a science fiction game. Corporal Newman is in a distant star port browsing at a souvenir vendor's stall and finds a holocard (which has a list price of 10 credits) that he wants to buy for his son back on Earth. But Corporal Newman's money is a little tight, so rather than paying tourist prices he decides to try to haggle with the vendor. Corporal Newman doesn't have the Trading skill so Lou rolls his WIL of 4 + 3d6, and gets a total of 17. The GM rolls the vendor's PRE (4) + Trading (4) + 3d6, for a total of 15. Because Corporal Newman's effect number was 2 points higher than the vendor's was, he gains a  $2 \times 5 = 10\%$  advantage in the price. Corporal Newman can buy the holocard for 9 credits.*

This resolution system is intentionally abstract. The base price is the standard list price for an item (as determined by the GM or published price list). The initial price from each person isn't actually stated, and the "final price" resulting from the negotiations represents the best offer that the loser can get from the winner.

## Vehicle Weapons (Type)

Characters with this skill are adept at the use (REF) and maintenance (INT) of modern, heavy, vehicle-mounted weapons. Characters using very simple weapons that have no guidance or "aiming" systems other than the aircraft itself, such as machine guns on a WWI bi-plane, can use the Piloting skill instead.

**Specialities:** Bombs, Cannon, Missiles, Rockets.

## Ventriloquist

The skill of throwing one's voice. Characters with this skill can perform auditory illusions (HLT), making it sound as though their voice (or any sound they can make with their throat or mouth) is coming from some other location, such as another person, from behind someone, or even from an inanimate object.

This skill can also be used as complementary to Mimicry.

## Water craft (Spec)

Characters with this skill have practical experience piloting powered, sea-going vessels, including performing manoeuvres in difficult conditions, manoeuvring and formations, performing inspections for fitness and sea-worthiness, and operating all common equipment normally associated with them (such as climate control, radio, radar or sonar, signalling with flags, and so on). Characters with this skill also know the basic workings of powered sea-going vessels and can perform as a crewman on one.

**Specialities:** Hovercraft, Large Vessels, Motorboats, Submarines, Sail boats, Tall Ships

## Writing (Spec)

Characters with this skill are capable of composing creative written works (INT). They also understand the finer points of written expression and can appreciate compositions within their speciality more than the average person (PRE). It is an important skill for bards and anyone wishing to create original songs. The appropriate performance skill is required to actually perform the composition.

A speciality must be selected when this skill is bought.

Successful use of this skill means the character composes a quality work, or appraises the value or quality of such compositions by others. The effect number of the roll determines the quality of the composition; the higher the effect number the better the writing, and, thus, the better the audience or reader's reaction and impression.

This skill may be used as a complementary skill to the appropriate skill when the composition is performed. For example, Writing (Music) is complementary to the Instrument skill, Writing (Speeches) is complementary to Orate, and so on.

**Specialities:** Comedy, Journalist, Literature, Music, Playwright, Screenwriter, Speeches.

## Zero-G

Characters with this skill are accustomed to operating in a zero-gravity environment (REF). They can perform simple

tasks without incurring a penalty for the lack of gravity, such as performing EVAs (extravehicular activities—space walks, planet walks and the like), manoeuvring at slow speeds, performing stationary repairs, and so on. Complex tasks, such as combat or fast movement, may be performed at no penalty with a successful Zero-G skill roll, or at a simple -3 with a failed roll.

The total absence of gravity can be thrilling, provided a character in a zero-G area has something to hang onto or some means to propel himself around his environment. Characters in zero-G suffer a -4 circumstance penalty to all REF and STR-related actions while floating, due to the awkwardness of having no traction on a surface.

Characters clinging to a surface may push or pull themselves along at one-half their MOV as a standard action, or their regular MOV as a full-round action.

GMs should note that knockback and recoil effects are applied to all participants if one or both aren't anchored against a firm surface. For example, if two characters are floating freely in a large zero-G area, and one hits the other hard enough to cause knockback, he will also knock himself back in the exact opposite direction. A character propelled in a direction with no means to slow or redirect himself will keep moving in that direction until he hits something (or someone).

## Occupation Templates (Optional)

The following section will group skills together to form the basis of the character's desired occupation (Pilot, Mechanic, Special Forces etc. etc.). This stage is optional and can be modified by the player during character creation. However if the template is taken unaltered the player will find that the template cost is slightly cheaper than taking a modified form. Templates are created by the G.M in order to represent the occupations needed in the campaign and players who play ball will find themselves with a few extra character points to play with.

### Template Bonus

The reason behind templates is to reward players who choose occupations designed by the G.M to interact with the campaign. The bonus also compensates the player for getting skills which may not be equally useful (*kinda like Calculus at High School*). To determine the Template Bonus, the total of the skill costs and any Trait advantages is compared to the following chart. Those extra points are expressed as a Disadvantage with a negative value.

<b>Template Bonus</b>	
<b>Total Points</b>	<b>Bonus</b>
1-4	No Refund
5-9	1 Point Refund
10-14	2 Point Refund
15+	3 Point Refund

### Example Templates

The following is a selection of templates. G.Ms are encouraged to add their own Occupation Templates to their campaign. Occupation Templates can also be referred to as "Military Occupation Specialities" (M.O.S) in military style campaigns.

#### Military

**Requirements:** none

<b>Skills/Traits/Disadvantages</b>	<b>Level</b>	<b>Base Level</b>
Knowledge (Military Procedures)	3	3pts
Knowledge (Enemy Forces)	2	2pts
Small Arms Skill Group	1	5pts
First Aid (Battlefield)	4	2pts
Bureaucracy	2	2pts
Knowledge (Chemical-Biological-Radiation)	2	2pts

#### Benefits

Military Rank (can be upgraded; see page 63)	3	3pts
--	---	------

#### Complications

Template Bonus		-3pts
Duty:		-4pts
Distinctive Features: Uniform		-2pts
<b>Total Template Cost</b>		<b>10pts</b>

**Army M.O.S Selection** Choose One of any of the MOS Groups and spend character points accordingly.

- Artillery:** Artillery (SPEC), Driving (SPEC), Navigation (SPEC), Computers, Electronics (SPEC), Mechanics (SPEC), Operate Electronics (SPEC)
- Cavalry:** Driving (SPEC), Vehicle Weapons (SPEC), Mechanics (SPEC), Electronics (SPEC), Machine Guns (SPEC)
- Infantry:** Small Arms Sub-category or Machine Gun (SPEC), Demolitions (SPEC), Surveillance (SPEC), Tactics (SPEC), Persuasion (SPEC)

#### Scientist

**Requirements:** None

<b>Skills/Traits/Disadvantages</b>	<b>Level</b>	<b>Base Level</b>
Computers	4	2
Mathematics	5	5
Purchase any 3 Skills from the following:		9

Engineering (TYPE)  
Astronomy  
Physics (SPEC)  
Archaeology (SPEC)  
Psychology (SPEC)  
Chemistry (SPEC)  
Biology (SPEC)

#### Complications

Template Bonus	-3
Psychological Disadvantage (Adverse): Scientific Curiosity	-4
<b>Total Template Cost</b>	<b>9 pts</b>

### Military: Commando

**Requirements:** must have taken Military Template

Skills/Traits/Disadvantages	Level	Base Level
Combat (Agency)	4	4
Knowledge (Instructor)	2	2
Choose One:	4	2
Demolitions (SPEC)		
Survival (SPEC)		
Surveillance (Reconnaissance)		

#### Complications

Template Bonus	-1
Hero's Code: Loyalty	-2
Duty (Jeopardous) Upgrades Military Complication.	-2
<b>Total Template Cost</b>	<b>3 pts</b>

### Rescue Worker

**Requirements:** None

Skills/Traits/Disadvantages	Level	Base Level
Professional (SPEC) e.g. <i>Firefighter, S.E.S</i>	4	2
Area Knowledge (Home city)	5	5
First Aid (Paramedic)	4	2
Choose Two:		5
Driving (SPEC) e.g. <i>Emergency Vehicles, Excavator</i>		
Survival (SPEC)		
Science Skill of Choice		
Knowledge (SPEC) e.g. <i>Rescue Methods, Hazardous Materials</i>		

#### Complications

Template Bonus	-2
Distinctive Features: Uniform	-4
Hero's Code: Mercy	-2
Duty	-2
<b>Total Template Cost</b>	<b>4 pts</b>

### Law Enforcement Agent

**Requirements:** None

Skills/Traits/Disadvantages	Level	Base Level
Choose 3 Skills from:		8
Small Arms and Melee Weapons Groups		
Unarmed Combat (Law Enforcement)	4	2
Knowledge (Law Enforcement Procedures)	2	2
Knowledge (Agency Speciality) e.g. <i>FBI, DEA</i>	2	2
Criminology	2	2
Bureaucracy	2	2
Purchase 2 from the following:		5
Driving (SPEC)		
Disguise		
Surveillance (SPEC)		
Area Knowledge (SPEC)		

#### Benefits

Legal Enforcement Powers	2
--------------------------	---

#### Complications

Template Bonus	-3
Distinctive Features: Badge	-2
Hero's Code: Law And Order	-2
Duty	-2
Nemesis: Villain	-4

**Reporter****Requirements:** None**Skills/Traits/Disadvantages**

	Level	Base Level
Profession (Journalist)	5	5
Area Knowledge (City or General Area)	4	5
Knowledge ("Beat")	3	3
Knowledge (Local Politics)	3	3
Purchase Three from the following:		9
Bribery		
Bureaucracy		
Writing (SPEC)		
Persuasion		
Surveillance (SPEC)		
Knowledge (Streetwise)		

**Benefits**

Perk: Press Pass	2
Connection(s) Three Contacts/Informants	4

**Complications**

Template Bonus	-3
Nemesis: Villain	-4
Nemesis: Legal	-2
Nemesis: Government	-2
Hero's Code: Loyalty	-2
Favours Owed	-2
Forsworn From Firearms	-2
<b>Total Template Cost</b>	<b>14 pts</b>

## Traits

Any time a situation occurs in a game that is covered by a character's trait, it automatically comes into play and will affect the character, influencing his behaviour or actions, or otherwise limiting or expanding that character's choice of actions.

The GM should decide which Traits would be allowed in his or her game before the players create their characters.

There are two basic types of Assembler Core Traits: *Complications and Benefits*. The Action! System Core Rules have an advantage/disadvantage system that isn't quite interchangeable. However resulting characters would still be very much compatible no matter which Trait system the Game Master uses.

## Traits List

Traits.....	42	Glass Jaw .....	48	Psionic Vulnerability.....	52
COMPLICATIONS.....	43	Hero's Code: Fair Play.....	48	Physical Disadvantage .....	52
Game Mastering Complications.....	43	Hero's Code: Honesty.....	48	Slow Reflexes .....	52
Buying Off Complications.....	43	Hero's Code: Law And Order.....	48	Small Size .....	53
<i>General Complications</i> .....	44	Hero's Code: Loyalty.....	48	Split Personality .....	53
Age .....	44	Hero's Code: Mercy .....	48	Unexceptional .....	53
Amnesia .....	44	Illiterate .....	48	Unlucky .....	53
Bad Driver .....	44	Impaired Hearing .....	48	Weak-Willed .....	53
Bad Shot .....	44	Impaired Mobility .....	49	<i>Restricted Complications</i> .....	53
Billy The Kid Syndrome.....	44	Impaired Vision .....	49	Accelerated Metabolism.....	53
Blind Fury.....	44	Inattentive.....	49	Activation Time.....	53
Blue-Collar Hero .....	44	Insatiable Curiosity.....	49	Animal Antipathy.....	54
Calling Card .....	45	Lasting Shame.....	49	Backlash.....	54
Chequered Past .....	45	Light-Headed.....	49	Bizarre Area Effect.....	54
Chemical Vulnerability.....	45	Lone Wolf .....	50	Cold-Blooded .....	54
Clumsy .....	45	Lummox .....	50	Diurnal Power Cycle.....	54
Concentration.....	45	Macho/Spartan .....	50	Elitist .....	54
Constantly Distracted.....	46	Magic Vulnerability.....	50	Form-Shifting .....	54
Dependency .....	46	Misinterpreted .....	50	Gesture-Dependent Ability.....	55
Dependent .....	46	Mistaken Identity .....	50	Inscrutable Patron.....	55
Disfigurement .....	46	Nemesis: Government.....	51	Life-Linked Power Focus.....	55
Distinctive Features .....	46	Nemesis: Legal .....	51	Limited Use, Instantaneous.....	55
Duty .....	46	Nemesis: Media .....	51	Limited Use, Ongoing.....	55
Easily Distracted.....	47	Nemesis: Villain .....	51	Material Bane .....	55
Faint Spark Of Life .....	47	Old Injury .....	51	Maximum Force.....	56
Favours Owed .....	47	Overconfident .....	51	Non-Oxygen Breather.....	56
Forsworn From Firearms.....	47	Phobia .....	52	Ostracism.....	56
Fragile .....	47	Poor Healing .....	52	Photophobia.....	56

Quirky Systems.....	57	Global Traveller.....	61	Danger Intuition.....	67
Recurring Nightmares.....	57	Legal Enforcement Powers.....	62	Distance Calculation.....	67
Red Tape.....	57	Minions.....	62	Disease resistance .....	68
Reduction.....	57	Mystic Library.....	62	Eidetic Memory .....	68
Restriction.....	57	Organisational Ties (Ranks).....	63	Environment Acclimatization .....	68
Severe Magnetic Signature.....	58	Own a Big Mecha (OBM).....	63	Extra Defensive Action.....	68
Special Requirement.....	58	Patron.....	64	Extra Offensive Action.....	68
Uncontrollable Power.....	58	Perk .....	64	Extra Movement.....	68
Unique Disadvantage.....	58	Personal Gear .....	64	Fast Draw.....	68
Unreliable Power .....	59	Position of Power.....	65	Fast Healer .....	68
Unusual Obligations.....	59	Protected Identity.....	65	Fast Learner (Skill Group) .....	69
Vulnerability .....	59	Safe House.....	65	Features.....	69
<b>BENEFITS.....</b>	<b>59</b>	Secret Lair.....	65	Good Sense of Time .....	69
<i>Social Benefits.....</i>	<i>59</i>	Social Advantage .....	65	Immunity.....	69
Advanced .....	59	Wealthy .....	66	Lightning Calculator.....	69
Allies .....	60	<i>Physical Benefits.....</i>	<i>66</i>	Lucky .....	69
Alternate Identity.....	60	Ambidextrous .....	66	Mechanical Aptitude.....	69
Amazing Costume .....	60	Animal Affinity.....	66	Night Vision .....	70
Assistant .....	60	Art of Distraction.....	66	Operate Mecha on Willpower.....	70
Connection(s) .....	60	Attractive .....	66	Psychic Awareness.....	70
Database/Library .....	61	Art of Command.....	66	Special Movement.....	71
Fame .....	61	Autonomic Control.....	67	Speed Reader .....	71
Global Contacts.....	61	Body Weapon .....	67	Well Rested .....	71
		Cosmetic Changes.....	67	Voice Alteration.....	71

## Complications

Life isn't always easy when you're a player character. In fact, sometimes it can be maddeningly difficult. Some of the more common disadvantages are presented here as **Complications**.

You're under no obligation to select complications for your character, but each complication selected during creation grants your hero a certain number of *Compensated* CPs in exchange. Complications are an excellent way to gain those last few CPs that will allow you to customize your character *just right*, and they're an intrinsic part of comic book lore. Every truly fascinating hero has a trademark weakness, an Achilles' Heel or a thread of tragedy that defines him as much as his abilities and achievements do.

**General Complications** may be selected by any character, provided that the GM notes and approves of each complication. There are also **Restricted Complications**, which are limited to characters with certain origins.

Ordinarily, characters should be restricted to no more than 10 Compensated CPs worth of complications. Individual GMs may be willing to allow the selection of more, using the rough guide below. Although CPs gained from complications can provide a boost to character power, a character with 20 or 30 CPs isn't getting away with anything. He's a ticking time bomb waiting for his complications to fall on him like an executioner's axe, so use them with caution:

Recommended	Complications
Standard Hero	10 CPs refunded
Flawed Hero	15 CPs refunded
Ill-Fated Hero	20 CPs refunded
Tragic Hero	25 CPs refunded
Doomed Hero	30 CPs refunded

## Game Mastering Complications

Game Masters should note that constantly applying a complication in every game would seriously annoy players. For example a character with the "Forsworn Firearms" complication is not going to be happy if the only way to resolve every mission is to pick up a gun and shoot out a console or rope or NPC. Players should be aware of the effects of their complications to the character and role play them accordingly. They shouldn't try to find loopholes in the complications in an effort to grab free character points. C'mon GMs, just say NO!

## Buying Off Complications

As the character gains Experience Points, you may elect to remove complications from your character, as a result of his accomplishments or self-improvements, provided the GM agrees that all necessary criteria have been met. For example, an enemy cannot simply be wished away— he must be confronted and decisively defeated (or otherwise dealt with) before he can cease to be a complication. When you remove a complication, deduct all of its effects (mechanical or otherwise) from your character sheet and character background.

## Misplaying Complications

Some complications add penalties to character statistics and need very little role-playing "maintenance." Others rely on a player's willingness to role-play them appropriately. Be warned that if the GM feels that you are ignoring your character's complications, he's free to warn you as many times he deems necessary. If his warnings aren't heeded, he always has the option of turning the Compensated CPs gained from a complication into Uncompensated CPs, saddling your character with an Experience deficit. Game Masers would rather play with their players rather than resorting to



playing the jack-booted “Führer des Spiels” (Leader of the game)

## General Complications

### Age

As your character can readily attest, it's not necessarily the years, it's the mileage.

**2 CPs:** Your character begins the game just past the cusp of “middle age.” His starting age will be 1d6 years past the minimum “middle age” prescribed for his race or meta-ability combination. Your character suffers a -1 penalty to either Strength, Reflexes, or Health and gains a +1 bonus to either Intellect, Willpower, or Presence.

**4 CPs:** Your character begins the game just past the cusp of “old age.” His starting age will be 1d6 years past the minimum “old age” prescribed for his race or meta-ability combination. He suffers an additional -2 penalty to either Strength, Reflexes, and Health and gains an additional +1 bonus to either Intellect, Willpower, or Presence.

**2 CP Special Handicap (Frailty):** Your character suffers an additional inherent -1 penalty to his Health Attribute Save and his Reflex Attribute Save.

### Amnesia

Your character's life before now is a blank slate. He is unable to remember where he came from, what his real name is, and what he was doing for large portions of his life. Evidence pointing in any specific direction is also frustratingly thin.

**2 CPs:** In addition to the obvious difficulties this can cause, the character is also quite obsessed with discovering what his mind is concealing. Any time the chance presents itself to explore the mystery of his past, the character will have to exert an incredible force of will (The GM may even call for a Willpower Attribute Save against a high TN) to resist it.

**Special:** Psionic or magical examination of the character's mind will be unable to reveal any of the secrets behind his amnesia, beyond general flickers and glimpses of vague clues.

### Bad Driver

Putting your character at the controls of any vehicle with more get-up-and-go than the average bicycle is an invitation to disaster.

**2 CPs:** Your character suffers a -3 penalty to all Drive/Pilot skill rolls.

**4 CPs:** Your character suffers a -6 penalty to all Drive/Pilot skill rolls.

**6 CPs:** Your character must spend an Action Point to even attempt a Drive/Pilot skill roll (at a -12 penalty). Otherwise, he automatically fails them.

**Limitation:** This complication is incompatible with any power or special trait which enhances skills in the Transportation Group. This complication can be also called “Bad Rider” for horsemanship or similar skills.

### Bad Shot

Your character isn't an out-and-out klutz, but he has great difficulty throwing or firing anything at opponents more than a few feet away.

**2 CPs:** Your character is considered Clueless with all ranged and thrown weapons, and may not become proficient with them. This trait also enforces a -3 penalty on all ranged attack rolls.

**4 CPs:** Your character has the depth perception of an inanimate carbon rod. He suffers an additional -2 penalty to all ranged attack rolls, for a total penalty of -6.

**1 CP Special Handicap (Uncoordinated):** Your character's positive Reflexes modifier does not improve his ranged accuracy. It still affects all other Reflexes-related scores normally. Your character must have a Reflexes score of 6 or higher to take this handicap. This complication is incompatible with any power or special trait which enhances skills in the Heavy Weapons, Simple Missile Weapons or Small Arms Group.

### Billy The Kid Syndrome

For some lamentable reason, your character has acquired a reputation as “the one to beat” within a certain field of skill or specialization. Cocky hotshots, ignorant wannabes, and consummate professionals alike are constantly on the lookout for your character, seeking to test themselves against him.

**2 CPs:** At fairly regular intervals, complete strangers (including meta-powered strangers) show up in your character's life and challenge him to some sort of contest relevant to his abilities (for example, if your character is inhumanly strong, his challengers will all be looking for contests of physical might). They don't take “no” for an answer and they're not always sporting or accommodating when your character is busy.

### Blind Fury

Under specific conditions selected by the player (and approved by the GM), the character will enter a state of unbridled anger. While enraged, the character will furiously attack the closest person, whether that individual is a friend or foe. Once that person is defeated or flees, the berserk character will attack the next closest “threat.” Examples of conditions that might initiate Blind Fury include: receiving a certain amount of damage, sight of blood, a specific sound or smell, being outnumbered in combat, seeing a friend in mortal danger, confrontation with a specific opponent, etc.

The character can only return to a normal emotional state under another specific condition. This return could involve a Willpower save, or could be an automatic reversion. Examples of return conditions include: no opponents in the vicinity, a specific calming technique performed by an ally, solitude, injection of a particular drug, being knocked unconscious, etc.

-1 CP Initiating the Blind Fury is difficult; reverting to normal emotional state is easy.

-2 CP Initiating the Blind Fury and reverting to a normal emotional state are both moderately difficult.

-3 CP Initiating the Blind Fury is easy; reverting to normal emotional state is difficult.

### Blue-Collar Hero



Poverty hasn't stopped your character from getting in on a career of heroic adventuring, but it certainly does make many other aspects of life a pain in the posterior.

**2 CPs:** Powers supplying equipment, vehicles or gadgets cost 1 CP per level reflecting the poor quality of materials the character can afford. Your character may not purchase the Wealth or Patron benefit during character creation.

**4 CPs:** He may not purchase any of the following Benefits: Patron, Safe House, Secret Lair, or Wealth or Powers: Gadgets, . His default Social attribute (both adventuring and civilian) is lowered by -2 for his generally dishevelled and amateurish air. From that point on, any attempts to increase his Gadget Power level cost twice the usual number of CPs.

**Limitation:** This complication may not be taken by members of the playboy social scene, nor may a character enter into the playboy or socialite scene unless this Complication has been bought off.

## Calling Card

Your character feels compelled to leave some sort of trademark at the scenes of his adventures or somewhere on the persons of criminals he puts out of commission. This calling card could be anything from a small physical object (note, playing card, dice, animal claw, etc.) to a minor act of vandalism or graffiti, or something even more absurd (criminals defeated by the character are always found without shoes, or with their faces painted blue, etc.).

**2 CPs:** The character must leave his "calling card" somewhere in the vicinity whenever he bests someone in combat, foils a villainous scheme, or causes a public scene while in costume. Any attempt to flee a scene without doing so will require a Willpower Attribute Save against a TN of 15.

**4 CPs:** The "calling card" is a rather unhealthy obsession rather than a merely eccentric habit. Leaving the "calling card" should require at least a full-round action, because it must be done *just so*. Any attempt to flee a scene without doing so will require a Willpower Attribute Save against a TN of 18.

**Limitation:** The GM may rule this complication off limits to characters with unusually high Willpower Attribute Saves and characters with excessive degrees of super-speed, at his discretion.

## Chequered Past

Your character once engaged in criminal or near-criminal activities, and although he's working to turn over a new leaf, he must still deal with the fallout of his past decisions.

**2 CPs:** Your character was convicted of misdemeanours, or merely suspected of his crimes. He suffers a -2 penalty to either his civilian Social attribute or his adventuring Social attribute.

**4 CPs:** Your character is a convicted felon, possibly even a former super-criminal. He suffers a -4 penalty to either his civilian Social attribute or his adventuring SOC attribute.

**2 CP Special Handicap (Exposed Identity):** If your character was convicted of a felony, you may choose to have that conviction smear both his civilian identity and his adventuring identity. Apply the penalty to both his civilian and his adventuring Social attributes.

**Limitation:** This complication is incompatible with any benefit or power that, during creation, provides a bonus to the Social attribute.

## Chemical Vulnerability

Your character's body and immune system are incapable of fully resisting the effects of drugs, poisons, and other deleterious substances.

**2 CPs:** Your character suffers a -3 penalty to any Saving Throw made to resist the effect of a poison or a drug. Furthermore, the TN of any skill roll made to aid or cleanse your character of a drug or poison rises by 2.

**4 CPs:** Your character suffers a -6 penalty to any Saving Throw made to resist the effect of a poison or a drug. Furthermore, the TN of any skill roll made to aid or cleanse your character of a drug or poison rises by 4.

**2 CP Special Handicap (Lingering Effects):** When your character is affected by a drug or poison, he must make an additional save against a secondary effect for each DUR attribute of the poison.

**Limitation:** This complication is incompatible with any trait or power that *specifically* improves the character's chance of withstanding the effects of drugs or poisons.

## Clumsy

Your character has great difficulty ducking and weaving in combat to avoid the blows of his opponents. Thus, he seems to get hit an awful lot more than he really should.

**2 CPs:** Your character suffers a permanent -2 penalty to his natural DEF. For example, a human with this problem would find his naked base DEF reduced to 8 rather than 10.

**4 CPs:** Your character suffers a permanent -3 penalty to his natural DEF.

**6 CPs:** Your character couldn't duck a punch if warning was sent to him via first-class mail a week in advance. He suffers a permanent -6 penalty to his natural DEF.

**Limitation:** This complication is incompatible with a REF attribute of 6 or over.

## Concentration

**Linked to Trait or Skill Group.** The character must concentrate while using a specific Trait that functions over a period of time; it does not apply to Traits with an instantaneous effect. If the character's concentration is interrupted voluntarily or by an outside event, the Trait ceases to function.

**1 CP:** The Trait requires slight concentration. The character can still perform other non-combat actions, but cannot engage in combat or use other Traits that also require Concentration.

**2 CPs:** The Trait requires intense concentration. The character can move at a slow speed and talk with others while using the Trait, but cannot perform any complex actions or use any other Trait.

**3 CPs:** The Trait requires full concentration. The character cannot do anything else while using the Trait; he or

she must remain still and devote full attention to the Power.

## Constantly Distracted

Your character is fairly intelligent, but lives a life so disorganized, chaotic, or frantic that he can never seem to find the time for extra study at his own leisure.

**2 CPs:** Your character's Intellect modifier is applied normally to all Intellect-related skills, but any INT-based skills will take twice as many experience points to purchase or progress as the character gains experience.

**Limitation:** This complication may only be taken by a character with an Intellect score of 6 or higher.

## Dependency

The character must have a particular substance or situation or he will suffer severe mental or physical distress. The exact effects vary widely depending on the addiction, but should result in a -3 to one or more Skill Groups or -1 to one or more attributes per level of complication. For example, a character addicted to tobacco might suffer jitters, and -1 REF, after going too long without a smoke.

Substances could be an illegal drug, a legal but expensive drug, or an unusual substance that the character must make or distil on his own. If the character must spend money to secure a dose of the substance, each dose should cost no less than \$100. If the character must create it himself, the raw materials should cost \$50 per dose and the TN of the skill roll (Knowledge: Chemistry) made to create the chemical must be at least 15.

The substance or situation the character needs is:

**2 CP:** Common (e.g., tobacco, Catholic Mass)

**4 CP:** Uncommon (e.g., an herb, imported food)

**6 CP:** Rare (e.g., feather of a mystical bird)

**2 CP Special Handicap (Controlled Supply):** The substance is rare and proprietary, and someone else has a monopoly on it. Your character is entirely dependent upon an NPC for his supply of the drug.

**1 CP Special Handicap (Side Effects):** The substance has an intoxicating or debilitating side effect. For one hour following the intake of each dose, your character suffers a -1 penalty to either REF and WIL.

**2 CP Special Handicap (Power-Linked):** Your character's meta-abilities are linked to or granted by the presence of the chemical in his system. When he begins to incur numerical penalties for withdrawal, he also loses the use of all of his meta-abilities until he receives a dose of his required substance.

**Limitation:** No meta-ability or trait granting resistance against poisons or chemicals will have any effect on this addiction.

## Dependent

Your character takes care (emotionally and financially) of someone extremely close to him (aunt, uncle, parent, grandparent, daughter, ward, etc.). This individual is relatively helpless compared to player characters and villains.

**2 CPs:** Your character must work to protect his own identity and the identity of his dependent(s). If the dependent(s) were ever to be revealed to your character's enemies, they would make the perfect hostages.

**Limitation:** This complication is incompatible with the Lone Wolf Complication.

**Special:** This complication may be taken multiple times, provided that each new Dependent is geographically separated from the others (for example, husband-and-wife grandparents would qualify as one Dependent if they live together and two Dependents if they live in different cities).

## Disfigurement

Your character suffers from a permanent, painless, but very obvious physical deformity. This could be anything from bestial features (a mane, a tail, etc.) to a misshapen body (hunchback, extensive scars) to unusual skin colour (moon-white, dark blue, etc.).

**2 CPs:** Your character suffers an inherent -1 penalty to his Presence score. Only his very close friends, family, and associates will disregard this penalty (GM's discretion). Furthermore, your character will suffer an additional -2 penalty to all Disguise checks, due to the difficulty of concealing his unusual features.

**4 CPs:** Your character suffers an inherent -2 penalty to his Presence score, as well as a -3 penalty to all Disguise checks.

**6 CPs:** Your character suffers an inherent -3 penalty to his Presence score, as well as a -6 penalty to all Disguise checks.

**Limitation:** This complication may not be taken by mechanoid or crystalline life.

## Distinctive Features

The character stands out and is noticed in a crowd because of some distinctive feature, be it some aspect of his appearance, a style of dress, accent, or a combination. A distinctive feature should be role-played by the character and can be an important, fun (and even humorous) aspect of the character.

His distinctive features are:

**2 CPs:** easily concealed (e.g., a scar, tattoo or attire)

**4 CPs:** concealed only with some effort, such as using Disguise or performance skills (e.g., mannerism, hair colour, speech impediment or accent)

**6 CPs:** not possible to conceal (e.g., a giant or dwarf, different race)

## Duty

The character has an obligation to some person or organization. Such an obligation is usually undertaken voluntarily, though it may be involuntary. Examples of duties include: service in the modern U.S. Armed Forces, an officer's commission in the Interstellar Fleet, a vocation as a full-time priest, or a knight's service to his liege. The character must

meet this obligations or risk censure, expulsion, or even imprisonment, depending on the nature of the Duty (as defined by the player, with the GM's permission).

A Duty can be used to represent any job, but it is recommended that GMs not allow it for trivial obligations or "duties" which the character (or player) doesn't mind losing. A voluntary Duty should involve something the character wants or needs to maintain (e.g., the character needs the job to pay bills and rent) rather than something selected merely for the point value. Involuntary Duties or those requiring a term of service (such as U.S. military service) should involve some type of punishment if violated by the character (e.g., an Article 15 non-judicial punishment for a service member violating the Uniform Code of Military Justice).

The character's duty affects his life:

**2 CP:** Rarely (once a month or less; e.g., a military reservist)

**4 CPs:** Occasionally (once a week or more; e.g., active duty military service, a police officer)

**6 CPs:** Constantly (every day, once or more times a day; e.g., an undercover operative or a soldier in a combat zone)

## Easily Distracted

Some characters are Easily Distracted by events, objects, people, or ideas, which are collectively known as triggers. Notable examples of triggers include attractive members of the opposite (or same) sex, wealth, food, movie stars, hobbies, gossip, hot cars, music, one's own looks, books or scrolls of ancient lore, and magical items. A character with this Disadvantage will become enthralled with the trigger until it can no longer influence him or her. Many characters have interests in a variety of triggers but do not possess this Disadvantage because their interest is moderated by their sense of judgement.

**1 CP:** The character is distracted by a trigger that is encountered infrequently.

**2 CPs:** The character is distracted by a few infrequent triggers, or by one trigger that is encountered frequently.

**3 CPs:** The character is distracted by several infrequent triggers, or by one trigger that is encountered constantly.

## Faint Spark Of Life

Some characters cling grimly to life, even when mortally injured. Your character isn't one of them. For some reason, once your character has been thoroughly incapacitated, his life just ebbs away, and he can't (or won't) do much about it.

**2 CPs:** Whenever your character is reduced to -1 or fewer LIF points, he has no chance of stabilizing naturally.

**4 CPs:** Furthermore, your character dies at -5 LIF points rather than -10.

**Limitation:** This complication may not be taken in conjunction with Benefits involving health, nor with Fast Healing, Nearly Unkillable, or Rejuvenation type powers.

## Favours Owed

Your character has, for whatever reason appropriate to his background, incurred a substantial obligation to an NPC. This is a debt of service and honour rather than just money... your character owes the NPC some of his time and effort at regular intervals, and there are definite consequences should he fail to heed the call. The NPC owed favours should generally be cordial, but not overly friendly to the character or sympathetic toward his goals. Crime bosses, corrupt police officers, and government agencies are all great fun in this role.

**2 CPs:** The NPC is firm about the debt, but neither sadistic nor too demanding. He will ask for small favours— a minor annoyance, but not a continual disruption in the character's life.

**4 CPs:** The NPC asks quite a bit more of the character, requiring risky and/or lengthy services that can thwart an attempt to keep a regular schedule.

**6 CPs:** The NPC all but owns the character, makes use of him all the time, and has the means to respond unusually harshly should the character not meet his obligations. This level of involvement must be approved by the GM, lest it become disruptive to an ongoing campaign.

**2 CP Special Handicap (Dark Secret):** The nature of the NPC, as well as the nature of the favours owed, is so contrary to the character's public motives and reputation that he has to conceal the existence of the debt, as well as the nature of his "excursions," from even his closest allies.

## Forsworn From Firearms

Your character shuns the use of guns of any sort, regarding them as crude, clumsy, noisy, dishonourable, or all of the above.

**2 CPs:** Your character steadfastly refuses to carry or use firearms, and usually regards those who do as being beneath contempt. In extreme circumstances, your character may attempt to pick up a firearm and use it for a purpose other than shooting someone else (cutting a rope, detonating an explosive barrel, etc.). The GM may call for a Willpower Attribute Save (TN 15+) before allowing him to do so.

**4 CPs:** Your character refuses to even touch a firearm, even when his life or the lives of others might be on the line. In utterly extreme circumstances (fate of the world hangs in the balance, for example) the character may attempt a very difficult Willpower Attribute Save (TN 21+) in order to pick up a firearm and use it on an inanimate object.

## Fragile

Your character lacks some of the robust toughness that might be expected of a heroic adventurer.

**2 CPs:** The character suffers an inherent -2 penalty to his Health Attribute Save.

**4 CPs:** The character suffers an inherent -3 penalty to his Health Attribute Save.

**6 CPs:** The character suffers an inherent -6 penalty to his Health Attribute Save.

**Special:** This complication *may* be taken in conjunction with a power (such as Enhanced Saving Throw) that improves the character's Health Attribute Save. But that would be rather silly, wouldn't it?

## Glass Jaw

Like a second-rate boxer, your character just can't seem to stay on his feet when opponents land a solid blow to the chin.

**2 CPs:** Whenever an opponent scores a successful critical wound against your character with an unarmed attack, that attack will cause an additional 1d6+2 points of Special/Stunning damage.

**4 CPs:** Whenever an opponent scores a successful critical wound against your character with an unarmed attack, that attack will cause an additional 2d6+2 points of Special/Stunning damage.

**Limitation:** This complication is incompatible with with any combination of powers or traits that grants an intrinsic TGH score of 6 or better.

## Hero's Code: Fair Play

Your character has made it part of his "work ethic" to never take undue advantage of an opponent, and to always fight in a forthright and sporting manner.

**2 CPs:** Your character refuses to flank others, shoot anyone in the back, take opponents unaware, or attack anyone lying prone upon the ground. In moments of drastic need, your character may attempt a Willpower Attribute Save (TN dictated by the GM, no doubt a very high number) to override this habit.

## Hero's Code: Honesty

Your character is scrupulously truthful, even when dealing with super-villains and criminals. Two wrongs don't make a right, after all.

**2 CPs:** Your character may not place any levels in the Disguise skill or the Gambling skill. Furthermore, he absolutely refuses to tell lies except in the most dire circumstances, even to "bad guys," and refuses to exaggerate, gamble, or even lie on behalf of others. In moments of drastic need, your character may attempt a Willpower Attribute Save (TN dictated by the GM, no doubt a very high number) to override this habit.

**Special:** Your character may still conceal his non-adventuring identities, and assume false names and faces.

## Hero's Code: Law And Order

Even if your character is a costumed vigilante, he has the utmost respect for the letter of the law and baulks at pushing its boundaries too far. He views himself as a "forward element" of uniformed law enforcement and prefers to turn matters over to the legitimate authorities as soon as possible.

**2 CPs:** Your character refuses to pick locks, break and enter, interrogate suspects without turning them over to the police first, commandeer vehicles or property from ordinary citizens, etc. Basically, if it involves anything more than patrolling and confronting criminals or villains engaged in obvious acts of mischief and mayhem, your character tut-tuts at it. In moments of drastic need, your character may attempt a Willpower Attribute Save (TN dictated by the GM, no doubt a very high number) to override this habit.

## Hero's Code: Loyalty

Your character views the bonds of heroic camaraderie as sacred and inviolate.

**2 CPs:** Your character is incapable of abandoning a friend or ally, even if it would make sense to do so, even in foolish or suicidal conditions. Come hell or high water, your character prefers to fight side by side with his friends and will die doing so if that's what fate decrees. Your character is rarely the one that gets sent running for help.

**Limitation:** This complication is incompatible with the Lone Wolf complication.

## Hero's Code: Mercy

Your character has sworn an oath to never take the life of another sentient being, even in the pursuit of the greater good.

**2 CPs:** Your character cannot intentionally kill another person, nor allow another person to die when action on the hero's part could save them. Your character will consider even an accidental death to be his complete responsibility, and will therefore exercise extreme caution with his powers and abilities.

**4 CPs:** Furthermore, your character has extreme difficulty dealing with the guilt caused by a death that he could have prevented. If he accidentally causes or fails to prevent (provided such prevention was in his power at all) a death, he will lose all of his current Action Points as a reflection of his anguish and will be unable to gain any more for the remainder of the game session.

## Illiterate

Your character cannot read.

**2 CPs:** Your character cannot read, and therefore cannot place skill ranks in Knowledges, Professions, Technical, or Sciences skill groups that could reasonably be determined to require any element of book-learning (GM's discretion). Your character also begins the game knowing only the spoken form of his native language.

## Impaired Hearing

Your character has, for whatever reason appropriate to his background, suffered damage to his auditory nerves. The nature of the condition prevents any form of magical or technological assistance from restoring his hearing, unless you wish to buy this complication off at a later date.

**2 CPs:** Your character retains some auditory ability, but not much. He suffers an inherent -3 penalty to Awareness checks, and may not spend Action Points to re-roll them.

**4 CPs:** Your character is totally deaf. A deafened character cannot hear, suffers a -3 penalty to Initiative checks, and has a 1 in 6 chance of spell failure when casting spells with verbal components. He cannot make hearing-based skill rolls



or react to sound related combat actions.

**Limitation:** This complication may not be taken in conjunction with any meta-ability that modifies or enhances the sense of hearing. If you do wish to buy this complication off, you may do so in stages if you like.

## Impaired Mobility

Your character suffers from a physical condition that restricts his ability to move. The nature of this condition is such that no magical, technological, or other power can reverse or remove it, unless you wish to buy this complication off at 2nd level or higher.

**2 CPs:** Your character's calculated MOV is reduced by 3 meters per turn.

**4 CPs:** Your character's base MOV is reduced by 3 meters. He suffers an -1 penalty to REF checks based on movement and a -2 penalty to Climbing, Sport, and Acrobatics skill rolls.

**6 CPs:** Additionally, your character cannot run or sprint. He suffers an intrinsic -2 penalty to REF checks based on movement and a -3 penalty to Climbing, Sport, and Acrobatics skill rolls.

**8 CPs:** Your character is paraplegic. He has lost all use of his legs and must rely upon a wheelchair or other conveyance. If removed from such a device, he may move only by crawling while prone, at a rate of one-third their STR attribute. At all times, he loses his REF bonus to DEF, suffers an intrinsic -2 penalty to REF checks based on movement, grants attackers a +2 bonus to attack rolls, and automatically fails Climbing, Sport, and Acrobatics skill rolls.

**10 CPs:** Your character is totally and absolutely immobile. He is considered helpless in his natural state. This complication is suitable only for truly bizarre character concepts such as brains in floating jars, hyper-developed infants, and the like. Such a character will have to be carried or moved by another character. Close GM oversight of the use of this Complication will be required.

**Special:** If you do wish to buy this complication off, you may do so in stages if you like.

## Impaired Vision

Your character has, for whatever reason appropriate to his background, suffered damage to his eyes or optic nerves. The nature of the condition prevents any form of magical or technological assistance from restoring his sight, unless you wish to buy this complication off at a later date.

**2 CPs:** The character has some sight, enough to fumble through life and detect size, light, and colour differences. He suffers a -1 penalty to all attack rolls and grants a +1 bonus on attack rolls to opponents facing him in combat. He suffers a -2 penalty on all Awareness, Surveillance and Tracking checks.

**6 CPs:** The character cannot see at all, and thus everything has full concealment to him. He has a 3 in 6 chance to miss in combat, loses his Reflexes bonus to DEX (if any), and grants a +2 bonus on attack rolls to opponents facing him in combat, just as if they were all invisible. He automatically fails all Tracking, Surveillance and Awareness checks.

**Limitation:** This Complication may not be taken in conjunction with any meta-ability that modifies or enhances vision.

**Blindsight, Sensory Link, Spirit Sense** and similar powers are exceptions.

**Special:** If you do wish to buy this complication off, you may do so in stages if you like. Assuming that your character undergoes treatment of some sort to restore his vision, it would be only proper to treat the recovery of sight as a gradual process.

## Inattentive

Your character is fairly oblivious to much of what transpires around him.

**2 CPs:** Your character suffers a -2 penalty to all Awareness checks.

**4 CPs:** Your character suffers a -3 penalty to all Awareness checks.

**Limitation:** This complication is incompatible with full deafness and full blindness, as granted by the Impaired Hearing and Impaired Vision complications.

## Insatiable Curiosity

Your character is compelled at every step of his life by an incurable need to peek behind every closed door (metaphorically speaking) and unearth every secret he possibly can. This includes everything from the intricacies of super-villains' plans to the hidden contents of their secret bases. Your character must be exceedingly cautious, lest he go the way of the proverbial cat.

**2 CPs:** Whenever your character is confronted with a chance to learn something new and interesting, especially if relevant to his current adventure or investigation, he must make a Willpower Attribute Save against a TN set by the GM in order to keep his mind on whatever else he needs to be doing.

**Special:** No character with this complication is ever compelled to pry into the private lives and secrets of those he trusts, respects, and adventures with. Though surely a few questions every now and again can't hurt a bit...

## Lasting Shame

Your character was responsible for some sort of public disaster (letting a murderous villain escape, accidentally destroying a public landmark, etc.) and the incident haunts him to this day. He's going to have to work hard to make up for it.

**2 CPs:** Your character gains a -2 penalty to his adventuring identity's starting SOC attribute, along with a +5 modifier to his adventuring identity's starting Reputation.

**Limitation:** This complication is incompatible with any advantage that raises your character's Social score during character creation.

## Light-Headed

As a result of either an old injury or simple fragility, your character suffers dizziness and frequent bouts of

unconsciousness when he is seriously injured.

**2 CPs:** Any time your character suffers a Serious wound from a single attack or incident (such as falling or being thrown into a wall), there is a 1 in 6 chance (non-cumulative) that he will immediately become stunned and remain that way for 1d6 turns. If the damage is dealt by blunt impact (such as a fist, a kick, a trauma weapon, a fall, or a collision with a hard physical object), the chance rises to a 3 in 6 chance.

**4 CPs:** Any time your character suffers a Serious wound from a single attack or incident, there is a 3 in 6 chance (non-cumulative) that he will immediately become stunned and remain that way for 1d6 turns. If the damage is dealt by blunt impact (such as a fist, a kick, a trauma weapon, a fall, or a collision with a hard physical object), the chance rises to a 4 in 6 chance.

**2 CP Special Handicap (Lights Out):** Rather than becoming stunned, your character will fall unconscious.

**Special:** This complication is incompatible with any combination of traits or powers that grants the character an intrinsic TGH score greater than 8.

## Lone Wolf

Your character is definitely not a team player. Whether he regards the presence of others as a hindrance to his abilities and style or just prefers to keep his own company is up to you.

**2 CPs:** Your character has an extremely difficult time working with others in groups and getting along in such arrangements for any length of time. If forced to tolerate the continual presence of others, he will be a grating, sarcastic, and generally divisive influence when he's not ditching the others to do things his own way.

**Limitation:** This complication is incompatible with Hero's Code: Loyalty.

## Lummox

Your character's firm, bulging muscles reveal his obvious power, but maybe he should have cut back on the weight-lifting and taken some dance lessons. His clumsiness makes the practical application of his strength fairly difficult.

**2 CPs:** Your character suffers an inherent -2 penalty to his melee attacks.

**4 CPs:** Your character suffers an inherent -3 penalty to his melee attacks.

**Limitation:** A character with the Lummox Complication cannot be ambidextrous.

## Macho/Spartan

Your character makes a point to project himself as tough, bullish, and ready for anything. He'll have nothing but scorn for anyone with a lesser tolerance for adversity and he certainly won't back down from a challenge.

**2 CPs:** One central function of this complication is that your character will get on others' nerves with amazing regularity. Furthermore, your character will routinely refuse to do things the easy and comfortable way. Water-beds? Water-beds are for sissies. Heavy clothing in freezing weather? Hey, freezing weather's good for you. Grin and bear it! The GM may call for a Willpower Attribute Save if your character ever attempts to back down from a challenge to his machismo.

## Magic Vulnerability

Your character suffers from a condition that weakens his defences against magic spells, mystic energies, and sorcery assaults. In Campaigns where magic is not prevalent, this vulnerability could be linked to Alien technology or similar otherworldly effects.

**2 CPs:** Your character suffers a -2 penalty to any saving throw made to avoid or lessen the effects of a magic spell or spell-like ability/effect.

**4 CPs:** Your character suffers a -3 penalty to any saving throw made to avoid or lessen the effects of a magic spell or spell-like ability/effect.

**6 CPs:** Your character suffers a -6 penalty to any saving throw made to avoid or lessen the effects of a magic spell or spell-like ability/effect.

**Limitation:** This complication is incompatible with any trait or power granting any special resistance whatsoever to magic spells or effects.

## Misinterpreted

An unpleasant group of people (religious fanatics, bloodthirsty vigilantes, Neo-Nazis, etc.) have embraced your character as a representative of their ideals, even if your character is thoroughly against them and their methods. Their adulation and/or misuse of your character's name can be embarrassing and frustrating.

**2 CPs:** As a result of his association with the group in question (and their continual efforts to portray him as "one of them") your character suffers a -4 penalty to his starting adventuring Social attribute. This group will also tend to appear in your character's life at untimely intervals, and statements to the press never seem to make them go away. If your character takes too much offence at them, they may feel "betrayed" by him and become the equivalent of a 2 CP Nemesis (see below).

## Mistaken Identity

Someone with power (or powerful friends) has mistaken your character for someone else (someone they despise, naturally) and is out to get your character. Alternately, your character might find himself continually confused with a villain who uses a similar name or costume ("I'm not Firemaster, dammit, I'm *Firedancer!*").

**2 CPs:** In the first instance, your character has an enemy (much like the Nemesis complication, below) who never seems to take the hint that your character isn't who they think he is. In the second instance, your character suffers a -4 penalty to his adventuring Social attribute during creation, and must deal with the constant indignity of rumours and mistakes concerning his true identity ("No, no, the victims were rescued by Firedancer! Dancer, you idiot! What? No, I did not burn the Washington Monument, that was FireMASTER!")

## Nemesis: Government

A powerful figure in a major government (or an entire agency, or a multi-national coalition) is out to get your character for reasons justifiable or otherwise. This nemesis will make recurring appearances in your character's life. Your character might experience everything from tax troubles to arrest warrants to expulsion from an entire country. The precise nature of their argument with your character is up to you.

**2 CPs:** The nemesis is a local power figure (city bureaucrat, small-town mayor) or a relatively weak or distant agency.

**4 CPs:** The nemesis is both popular and powerful (mayor of a huge city) or an agency with a respectable reach.

**6 CPs:** The nemesis is a dangerously powerful national figure (senator, vice-president) or a formidable agency such as MI-5 or the CIA.

**8 CPs:** The nemesis is either a pivotal world figure (President of the United States, perhaps) or a major coalition (NATO) with worldwide striking power.

## Nemesis: Legal

A powerful lawyer (or an agency full of lawyers) is out to get your character for some real or imagined slight. They might be seeking a civil suit relating to one of your character's earlier adventures (Property damage? Wrongful assault?) or they might be against player characters on principle. The annoying possibilities of this complication are endless. Your character would be well advised to retain skilled legal counsel and to avoid accepting manilla envelopes from strangers in public places.

**2 CPs:** The nemesis is a local ambulance-chaser, persistent if not overly menacing.

**4 CPs:** The nemesis is a cunning and experienced partner in a decently-sized firm with branches in several cities.

**6 CPs:** The nemesis is a legal juggernaut, one of the ten most powerful firms in North America or Europe, with offices all over the place and a team of lawyers assigned full-time to your character's case.

**8 CPs:** The nemesis in question has a branch office dedicated entirely to pursuing your character's case, twenty-four hours a day. Private detectives are after your character, a dozens summons await him at any given time, and class action suits are pending in a dozen jurisdictions. Pray for death.

## Nemesis: Media

An influential figure (or group of figures) in the local or national media holds a grudge against your character and they love nothing better than to pursue it in print, on tape, and on the internet. Your character will find himself routinely criticized, lambasted, ridiculed, and dissected (metaphorically speaking) in a wide variety of journalistic tabloids.

**2 CPs:** The nemesis is a small-town reporter or editor, or a tabloid nut case.

**4 CPs:** The nemesis has some clout, as an editor or award-winning reporter for a major city newspaper or TV station.

**6 CPs:** The nemesis is a national media figure – an established syndicated columnist read by millions or a major network TV journalist seen by tens of millions.

**8 CPs:** The nemesis is an entire publishing chain or a major national network, full of celebrities and researchers clamouring for your character's head on a pike.

## Nemesis: Villain

A super-villain has taken a decided interest in pursuing and defeating your character. Your character's nemesis regards his fight with your character as one of the driving interests of his life. Whether or not your character agrees is irrelevant.

**2 CPs:** The nemesis is directly comparable in power and ability to your character, though he doesn't show up very often.

**4 CPs:** The nemesis is directly comparable in power and ability to your character, and he takes a much more frequent interest in bothering your character.

**6 CPs:** The nemesis is more powerful and able than your character, with significant resources at his command, and he takes everything very, very personally.

**8 CPs:** How could it be worse? The villain is a total nightmare – he knows where your character was born, he knows all of your character's least favourite movies, he keeps all of your character's childhood friends in a cryogenic torture device, and he *never* runs out of robot sharks. It's crazy– if your character beats up fifteen robot sharks on Tuesday, twenty more will be swimming in his bathtub on Wednesday.

## Old Injury

Your character suffers from the lingering effects of an old battle wound that never seems to leave him completely.

**2 CPs:** Whenever your character sustains a critical wound, he must succeed in a Health Attribute Save against a TN equal to 6 + [total points of damage dealt]. If he fails, he will suffer a -2 penalty to Reflexes and a -2 penalty to Strength for the next twenty-four hours. Multiple critical wounds in that span of time will yield cumulative results.

**4 CPs:** As above, save that each critical wound will also deal an additional 2d6 points of special/stunning damage and the ability penalties will last for forty-eight hours. Your character's old injury (and its associated penalties) cannot be healed by any form of technological or super-normal intervention.

**Limitation:** This complication is incompatible with the Regeneration power.

## Overconfident

Your character is absolutely certain that he can take any challenge set before him, even if the odds against him are ridiculous. Unfortunately, your character is also pretty much wrong.

**2 CPs:** Your character scoffs at the idea that "discretion is the better part of valour." He won't back down from a fight, he dislikes calling for reinforcements, and he has a habit of constantly underestimating any danger or opponent placed in his way. Your character might be forced to make a Willpower Attribute Save any time he attempts to withdraw from danger.



or back down from a challenge.

## Phobia

Your character has an unreasoning fear of a certain thing or situation. This phobia must centre on an object or situation that is reasonably common, yet not entirely disruptive to the ongoing game. Possibilities include (but are not limited to): *Snakes, Firearms, Spiders, Sharp Objects, Darkness, Hospitals and Doctors, Heights, Aircraft, Water, Automobiles, Magic and the Occult*

**2 CPs:** When your character is in the presence of the object of his phobia, he suffers a -2 penalty to all of his rolls, including skill rolls, attack rolls, and saving throws. Furthermore, he may be required (GM's discretion) to attempt a Willpower Attribute Save (TN 12) if forced to closely approach a phobia trigger or remain in its presence for very long.

**4 CPs:** The penalty to all rolls increases to -3, and the TN of the Willpower Attribute Save increases to 15.

## Poor Healing

Your character recovers from injury and illness at a rate much slower than normal.

**2 CPs:** Whenever your character rests or undergoes care to regain LIF points, he regains them at half the ordinary rate. Furthermore, anyone using the *Healing* power or the First Aid skill on him suffers a -2 penalty to his skill or ability roll.

**Limitation:** This Complication is incompatible with any trait or power that increases the character's rate of healing. This includes the Fast Healing power.

## Psionic Vulnerability

Your character suffers from a condition that weakens his defences against psionic skills, traits, and effects.

**2 CPs:** Your character suffers a -2 penalty to any roll made to avoid or lessen the effects of a psionic ability.

**4 CPs:** Your character suffers a -3 penalty to any roll made to avoid or lessen the effects of a psionic ability.

**6 CPs:** Your character suffers a -6 penalty to any roll made to avoid or lessen the effects of a psionic ability.

**Limitation:** This complication is incompatible with any trait or power granting any specific resistance whatsoever to psionic effects.

## Physical Disadvantage

The character has some physiological illness or condition that impacts his life or otherwise limits his ability to function. The condition may be mild, moderate or severe. The player defines the ailment when the trait is taken. Characters may take this trait multiple times, each time for a different ailment.

The level of the trait is based on the frequency and intensity of the condition.

An Annoyance (2 CP) affects the character infrequently (once every two game sessions, on average) and impacts the character in a minor way (the condition slightly affects the character's actions, causes -3 on related skill rolls, partially incapacitates the character for hours at a time or completely incapacitates the character for minutes at a time).

Examples include a moderate allergy that causes a bad rash or sneezing, severe dyslexia, muteness, a missing finger, arthritis, a petit mal seizure that causes loss of muscle control or mild paralysis.

Adversely affecting the character frequently (once per game session, on average) and impacts the character in a moderate way (the condition moderately affects the character's actions, causes -6 to related skill rolls, partially incapacitates the character for days at a time or completely incapacitates the character for hours at a time). This refunds 4 CP.

Examples include Type I (insulin-dependent) Diabetes resulting in insulin shock if taken without food or unconsciousness if food is eaten without taking insulin, a missing limb, an early case of Cerebral Palsy or Parkinson's Disease causing mild tremors or a severe allergic reactions to common substances.

A Jeopardous condition severely affects the character's actions, causes -9 penalty on related skill rolls or prohibits skill rolls altogether at the GM's discretion, or completely incapacitates the character for days at a time or permanently.

Examples include grand mal epileptic seizures, advanced cases of Cerebral Palsy, two or more missing limbs, or paralysis below the waist.

The negative effects of the trait may be curtailed or lessened with the application of medicine, a ritual or some other means, reflecting an addiction or need for regular medication. No Control Roll is allowed for physical disadvantages.

The character's condition:

**2 CPs:** affects the character infrequently and impacts the character in a minor way.

**4 CPs:** affects the character frequently and impacts the character in a moderate way.

**6 CPs:** affects the character very frequently or constantly and impacts the character in a major way.

## Sample Physical Disadvantages

Listed below are a number of suggested Physical Disadvantages. You are free to make up your own, use these, or both for your game.

Diabetes; Dyslexia; Epilepsy; Illness; Inflexible (Stiff); Lamé; Mute; Overweight; Vertigo.

## Slow Reflexes

Your character's nerves just don't have the sort of pep they really need to yank his body out of immediate danger.

**2 CPs:** The character suffers an inherent -2 penalty to his Reflex Attribute Save.

**4 CPs:** The character suffers an inherent -3 penalty to his Reflex Attribute Save.

**6 CPs:** The character suffers an inherent -6 penalty to his Reflex Attribute Save.

**Limitation:** This complication is incompatible with any trait or power that improves the character's Reflex Attribute Save.

## Small Size

Your character, though an adult, is extremely small for his age and species. He is, in fact, no bigger than most adolescents, and while this can occasionally have its advantages it can also be a tremendous frustration.

**2 CPs:** Your character is one size class smaller than the adult norm for his race. Apply all the appropriate modifiers. Your character suffers an intrinsic -2 penalty to all Negotiation, Persuasion, and Disguise checks. He may occasionally suffer taunts and pranks from insensitive NPCs.

**Limitation:** This complication may not be taken by young characters (minors), nor in conjunction with size altering abilities such as the Shrinking, Shapeshift or Growth power.

## Split Personality

Your character's mind has fragmented under the pressure of heroic adventuring, and his player character persona has drawn completely apart from his "civilian" identity.

**2 CPs:** Your costumed player character and his "civilian" identity act like two different people. Although your character has no trouble shifting from one identity to the other (his subconscious takes care of that), his civilian identity doesn't recall anything done as a player character, nor does the player character recall life as a civilian. If your character has meta-abilities, he conveniently forgets about them when he's in his civilian mindset. All of this can make your character very confusing to get along with. On the positive side, the civilian personality will manufacture subconscious excuses to keep himself in the presence of his adventuring associates and to rush off for adventure whenever necessary.

## Unexceptional

Your character just doesn't seem to truly excel at any of his natural abilities.

**2 CPs:** Your character may never have any attribute score higher than 10.

**4 CPs:** Your character may never have any attribute score higher than 6.

**6 CPs:** Your character may never have any attribute score higher than 4.

**Limitation:** This Complication is incompatible with any special ability or power that would raise one or more of your character's ability scores above 10. Very temporary increases (such as those granted by a power simulating a *Berserker Fury*) are still acceptable.

## Unlucky

Nothing ever seems to go right for your character, and others frequently notice.

**2 CPs:** Your character cannot spend Action Points to roll two dice when making skill rolls.

**4 CPs:** Any time your character spends one or more Action Points for any other reason, there is a non-cumulative 2 in 6 chance that the Action Point(s) will be lost without having any effect.

**Limitations:** This complication is naturally incompatible with the Luck power.

## Weak-Willed

Your character just doesn't have the mental gumption required to stand up to the challenges he faces.

**2 CPs:** Your character suffers an inherent -2 penalty to his Willpower Attribute Save.

**4 CPs:** Your character suffers an inherent -3 penalty to his Willpower Attribute Save.

**6 CPs:** Your character suffers an inherent -6 penalty to his Willpower Attribute Save.

**Limitation:** This complication is incompatible with any trait or power that improves the character's Willpower Attribute Save.

## Restricted Complications

### Accelerated Metabolism

Your character suffers from a metabolism that "burns" faster than an ordinary member of his species. This causes a variety of deleterious effects.

**3 CPs:** Your character must eat at least one meal every twelve hours or become automatically exhausted. Numerical fatigue penalties for your character are always doubled. Last but not least, your character's body distributes chemicals so fast throughout his system that he suffers a -2 penalty to all rolls made to resist drugs, chemicals, poisons and their effects.

**5 CPs:** Your character must eat at least one meal every six hours or become automatically exhausted. Numerical fatigue penalties for your character are always doubled. Last but not least, your character's body distributes chemicals so fast throughout his system that he suffers a -3 penalty to all rolls made to resist drugs, chemicals, poisons and their effects.

### Activation Time

**Linked to Trait or Skill Group.** A character with this Complication cannot use one of his or her Traits whenever desired because it requires a short time to activate. Once activation has started, only the character can stop it from becoming active when the appropriate time is up. This could represent a physical change that is not instantaneous, the collection of spiritual energies to perform a task, a device that takes time to "power up," or an Trait that only works when the character is mentally prepared (or angry, or overcome with another emotion).

A refund of 2 additional CP are granted if the activation must start again from the beginning if it is interrupted before the Activation Time has elapsed. An example of this is a spell that must be chanted completely before the Power activates; if it is interrupted, the spell must be started again from the beginning. The Concentration Complication is often linked to these two applications of Activation Time.

-1 CP      The Trait requires a Turn to initiate.

- 2 CP      The Trait requires a minute to initiate.
- 3 CP      The Trait requires an hour to initiate.

## Animal Antipathy

Animals don't like your character at all, and they make their distaste extremely obvious.

**2 CPs:** Your character suffers a -3 penalty to any roll involving an animal (except for rolls made to attack an animal). Dogs will bark at him, cats will hiss, and horses will buck and shy away. Any wild animals encountered will have their reactions toward your character shifted one column into the negative.

**4 CPs:** Your character suffers a -6 penalty to any roll involving an animal (except for rolls made to attack an animal). Dogs will howl at him, cats will hiss and scratch, and horses may attempt to kick him. Any wild animals encountered will have their reactions toward your character shifted one column into the negative, and animals that are already hostile will attack your character in preference to anyone else nearby.

**Limitation:** This complication is incompatible with Animal Affinity or communication type powers.

## Backlash

Linked to Trait that requires a control roll to activate (GM's discretion). The character suffers from an unfortunate side effect whenever an associated Trait fails to work. If the character fails his or her check when using the Trait, the character is hit with the energy or essence that would have powered the Trait's use. The Backlash could be physical damage, memory loss, Ability Score drain, disorientation, or many other effects that make the character's life more difficult. The player and GM should determine the game effect of the Backlash.

- 1 CP:**      The backlash occurs if the character fails the check by 6 or more.
- 2 CPs:**    The backlash occurs if the character fails the check by 3 or more.
- 3 CPs:**    The backlash occurs if the character fails the check by 1 or more.

## Bizarre Area Effect

For some reason, your character is constantly plagued by some sort of bizarre cosmetic or environmental effect, emanating from him as a side-effect of one or more of his super powers. Perhaps he exudes an unpleasant stench, or glows with a faint green light. Perhaps reality itself bends around him with a perceptible curve, or an aura of unpleasant coldness affects all who near him.

**3 CPs:** Your character suffers a -3 penalty to Stealth and Disguise checks due to the obvious and annoying nature of his bizarre effect.

**5 CPs:** Your character also suffers a -2 penalty to Presence as a result of the ridiculous, annoying, or eerie nature of his area effect.

## Cold-Blooded

Your character's circulatory system has difficulty maintaining his essential core temperature on its own.

**2 CPs:** Your character must spend at least one hour (preferably more whenever possible, but one is sufficient) out of every twenty-four basking in a heated environment, under a strong sun, or against a heated object. If he cannot, he will suffer a -1 penalty to Strength, Reflexes, and Willpower until he is able to do so again. These penalties are cumulative, accruing every 24 hours if the character is denied external warmth for long periods of time. If any one of the listed abilities reaches 0, your character will enter a comatose state. When they all reach 0, he will die.

**Limitation:** This complication is *not* incompatible with powers or special abilities that render the character resistant to damage from cold-based sources. However, such resistances will not affect this complication at all.

## Diurnal Power Cycle

Your character's intrinsic or granted meta-abilities are closely attuned to the rising and setting of the sun, and are only useful for about half of each twenty-four hour day, allowing for seasonal variations.

**4 CPs:** Your character may access his powers only between dawn and dusk, or only between dusk and dawn (your choice). During transitional periods (five minutes on either side of sunset or sunrise) there is only a 3 in 6 chance per attempted activation that your character will have the use of a power.

## Elitist

Your character is a genuine snob, and absolutely refuses to "demean" his meta-abilities by using them on anyone without a comparable level of power.

**2 CPs:** Your character will not use his meta-abilities on non meta-powered opponents unless they have something that gives them a considerable edge (such as high-powered firearms, commando gear, etc.). Furthermore, once your character has taken the measure of a meta-powered opponent, he will refuse to use an overwhelming level of power, preferring to "tone down" his own power use to a comparable level. In moments of drastic need, your character may attempt a Willpower Attribute Save (TN dictated by the GM) to override this habit.

**Limitation:** This complication may not be possessed by baseline characters.

## Form-Shifting

Your character is unable to call upon his meta-abilities unless he shifts himself to an alarming and unnerving alternate form.

**2 CPs:** Your character is unable to use any meta-abilities whatsoever unless he shifts (as a movement action) into his alternate form. This alternate form suffers a -1 penalty to Presence, but allows full access to the character's powers. Reverting to regular form is a standard action costing nothing. If the character is slain or knocked unconscious, he will revert to his natural form.

**4 CPs:** Transformation to your character's alternate form requires a full-action. While shifting, your character loses his

REF bonus to TGH.

**2 CP Special Handicap (Monstrous Form):** Your character's alternate form is not merely unnerving, it is grotesque or blood-curdling. Your character suffers a -6 penalty to Presence in his alternate form and causes terror or disgust among strangers when he adopts it.

**2 CP Special Handicap (Stress Trigger):** Your character frequently experiences uncontrollable shifts to his alternate form when he is angered, upset, or injured. He must make a Willpower Attribute Save to avoid changing— the TN is 12 when he is merely under stress and agitated, 15 when he is angered, and 18 when he is physically injured.

**2 CP Special Handicap (Mental Weakness):** Whenever your character form-shifts, he suffers a temporary -3 penalty to either his Willpower score or his Intellect score, and thus a -3 penalty to any related skills. You may select one permanent penalized ability, or roll a die to randomly determine which ability takes the hit each time your character form shifts.

**Limitation:** This complication is incompatible with any level of the Energized Form power unless the character possesses other powers besides Energized Form.

## Gesture-Dependent Ability

Your character needs to use sudden, fluid gestures with his hands in order to control and evoke one or more of his abilities.

**1 CP:** Select one meta-ability which your character's hands and arms must be free and unfettered to use the power properly. If your character's arms are bound or restrained, the power may not be used at all. If your character's hands are ever injured or otherwise partially disabled, the GM may apply a percentile failure chance to each attempted use of the power, appropriate to the severity of the injury.

**Special:** This complication may be taken multiple times. Each time it is taken, it applies to a different meta-ability.

## Inscrutable Patron

Your character's patron is strangely distant, alien, chaotic, and/or frustrating. It rarely answers questions or summons, communicates infrequently or bizarrely, has no regard for human conventions of respect and dignity, and is a major pain to deal with at the best of times.

**2 CPs:** The annoyances brought about by this Complication are left to the discretion of the GM, but suffice to say that your character will not enjoy the same clear lines of communication most avatars share with their patrons.

**Limitation:** This complication is allowed only to character concepts that have a benefactor providing their powers, be it technological, magical or similar.

## Life-Linked Power Focus

Your character's focus is not just the source of his powers— it has an uncanny effect on his overall health.

**2 CPs:** If your character is ever physically separated from his focus (for longer than 1 minute), he will suffer an immediate -1 penalty to both Strength and Health. This penalty will last for as long as he is out of contact with the focus.

**4 CPs:** Furthermore, your character will suffer a -2 penalty to Reflexes and Presence.

**6 CPs:** In addition to the penalties already described, your character must make a Health Attribute Save when he is physically separated from his focus, against a TN of 15. Failure means that he will be afflicted with a sickly weakness and a wild-eyed longing for his focus, further reducing his capabilities. He will suffer a -2 penalty to TGH, grant a +2 bonus to all attackers, and suffer a -2 penalty to his Intellect and Willpower scores. If the saving throw is successfully made, it must be made again at every twenty-four hour interval until it is failed or the character recovers his lost focus.

## Limited Use, Instantaneous

**Linked to Trait/Skill Group with an instantaneous effect.** The character can only use a specific Trait occasionally. This may result from a need to recharge the Trait (or a device), an incredible drain on the character's internal reserves, or a different form of limitation. Only under exceptional circumstances (and at a great sacrifice) can the character use the Trait more often than indicated by this Disadvantage.

**3 CP:** The character can only use the Trait three times a day.

**6 CPs:** The character can only use the Trait twice a day.

**9 CPs:** The character can only use the Trait once a day.

## Limited Use, Ongoing

**Linked to an Trait that can be used on an ongoing basis.** After the character uses a specific Trait, he or she cannot use it again for a specific period of time; the longer the Trait is used, the longer the rest period must be. For example, the muscles of a character with Superstrength may need time to recuperate after use, or an Item of Power that grants Flight may need to be recharged between uses. Only under exceptional circumstances (and at a great sacrifice) can the character use the Trait again before the waiting period has elapsed.

**1 CP:** For every minute the character uses the Power, he or she must wait 1 minute before the Trait functions once again.

**2 CPs:** For every minute the character uses the Power, he or she must wait 5 minutes before the Trait functions once again.

**3 CPs:** For every minute the character uses the Power, he or she must wait 10 minutes before the Trait functions once again.

## Material Bane

Your character is extraordinarily vulnerable to injuries from a single material substance. A bane might be a specific metal (gold, silver, cold iron, etc.), a special wood (Rowan, Ash, Yew, etc.) or a completely fictional substance, as



appropriate to your character's background. Your character had best try to keep his vulnerability a closely-guarded secret.

**2 CPs:** Whenever your character is struck by a weapon shaped from or incorporating his Bane, the following must be noted:

- No natural or implanted Armour Rating (that is, A.R not granted by armour or force fields) will reduce the bane damage *at all*.
- All attacks with a bane weapon or substance have their damage type effects raised one level against a vulnerable target. For example Light wounds would be treated as a serious wound even though only 2x HLT in damage was inflicted.
- Even simple contact with the bane substance will result in 1d6 points of special/lethal damage to a vulnerable target.
- If a character is reduced to 0 or fewer LIF Points by bane damage, but not killed outright, the character will gain a permanent, livid scar and a -1 penalty to the Presence attribute.

**4 CPs:** As above, and worse— all critical wounds with a bane weapon deal an additional 2d6 points of special/lethal damage. All attacks with a bane weapon have their damage type effects raised two levels against a vulnerable target.. A character reduced to 0 or fewer LIF points by bane damage must make a Health Save against a TN of 12 or die immediately. Even simple contact with a bane substance will cause 2d6 points of special/lethal damage.

**2 CP Special Handicap (Common Bane):** Iron, for example, is a great deal more common than silver.

## Maximum Force

**Linked to Trait or Attribute.** The character cannot use a specific Trait at the lowest end of its power range. This could represent a character who is too talented for his or her own good, an item that only functions within certain parameters, a powerful character who pushes the Trait's limits so often that he or she has forgotten how to use it at a low Level, or something different.

**X CP:** The character cannot use up to Level X of the Trait. The Trait must be at Level (X+1) or higher

## Non-Oxygen Breather

Your character's respiratory system processes something other than oxygen. In earth like environments, he will require some sort of filtration or portable atmosphere supply, as well as a sealed private refuge away from earth-standard atmosphere.

**2 CPs:** Oxygen is treated as an inert gas to your character— breathing it causes him no toxic distress, but he can smother in these conditions the same way a human can smother in carbon dioxide. Apply drowning rules if your character finds himself in an oxygen atmosphere without a filtration mask (treat as a gas mask) or holding his breath.

**4 CPs:** Oxygen is a metabolic poison to your character, and should not be breathed at all. Exposure to oxygen atmosphere (once your character ceases holding his breath) counts as a poison attack, save TN 15, initial and secondary attribute damage of 1d6 off DEF, for each round of exposure. Thus, your character will suffer both drowning and poison effects at once, and the poison effects will linger if he manages to avoid asphyxiation.

**6 CPs:** Oxygen is a virulent metabolic poison to your character and an irritant to his mucous membranes. He must not allow any part of his face or respiratory system to come into contact with it. Even momentary exposure to oxygen (regardless of whether or not your character holds his breath) will count as a poison exposure, as described above, with a Health Save TN of 18. Exposure of his eyes will require a Health Attribute Save of TN 21 against blindness, which will last for 1d6 turns after exposure to oxygen ceases. Saves against poison and blindness must be made each turn of exposure!

## Ostracism

Your character is feared, hated, and discriminated against for something in his nature that he cannot change, be it his alien origin, his mutant genes, or anything similarly odd.

**2 CPs:** Your character experiences occasional taunts from strangers, and often finds himself subjected to epithets or unpleasant scrutiny. Sometimes, shops or restaurants won't admit him, but he's relatively free from actual violence.

**4 CPs:** Your character faces a society with a deeply entrenched suspicion of his kind, and as a result experiences constant discrimination, embarrassment, disdain, and occasionally even threats or physical assaults.

**6 CPs:** The prejudice your character faces is officially sanctioned by the government of the society in which he lives. He is formally treated as a second-class citizen, if he enjoys any rights at all, and must often submit himself to "security registration" and restricted movement patterns.

## Photophobia

Your character has a marked aversion to bright light in general and direct sunlight in particular.

**2 CPs:** Whenever your character is exposed to bright light without the benefit of protection (such as sunglasses), he will suffer a -1 penalty to all of his skill rolls and saving throws. Whenever he is exposed to natural sunlight, he suffers that penalty automatically and loses 1 LIF point per turn of exposure. This lethal damage is irresistible.

**4 CPs:** The effects of the complication are doubled— in bright light, the character suffers a -2 penalty to all skill rolls and saving throws. When exposed to natural sunlight, he suffers that penalty automatically and loses 2 LIF points per turn of exposure. This damage is irresistible.

**6 CPs:** The effects of the complication are tripled— in bright light, the character suffers a -4 penalty to all skill rolls and saving throws. When exposed to natural sunlight, he suffers that penalty automatically and loses 3 LIF points per turn of exposure. This damage is irresistible.

**8 CPs:** In bright light, the character suffers a -6 penalty to all skill rolls and saving throws. When exposed to natural sunlight, he must make a Health Attribute Save against a TN of 12 or suffer 4d6 points of irresistible damage per turn of exposure, as he bursts into actinic flame. If he makes his save, he will suffer only 2d6 points of irresistible damage.

**Limitations:** This complication is incompatible with any resistance or immunity to light-based attacks and with any power that allows the creation of light.

## Quirky Systems

Your character's body possesses a form of component or augmentation that behaves strangely when subjected to shock or damage.

**2 CPs:** Whenever your character suffers a critical wound or more than ten points of electrical damage from a single attack, there is a 2 in 6 chance (non-cumulative) that system dysfunction will render him a bit spastic, inflicting a -1 penalty to his TGH and granting a +2 bonus to attack rolls against him, for 2d6 turns. If this complication is activated again while the character is still suffering from a previous activation, roll the d6 and add that many turns to his current bout of trouble.

**Limitation:** This complication may only be possessed by character concepts that have magical, technological or other form of artificial augmentation.

## Recurring Nightmares

When the Recurring Nightmare Disadvantage haunts a character, he or she has trouble sleeping at nights and functions at less-than-optimum performance during the day. The nightmare can be a memory of a tragic event or traumatic experience, or it might be something else such as a prophetic vision or warning. The nightmare may not occur every night but it will haunt the character on a regular basis. Additionally, the nightmares do not need to portray the exact same events repeatedly, but the visions should be related in some way. The details concerning the subject matter of the nightmares and why they occur is the responsibility of the GM and the player to create.

**1 CP:** The nightmares occur infrequently and have a slight effect on the character's lifestyle.

**2 CP:** The nightmares occur frequently and have a moderate effect on the character's lifestyle.

**3 CP:** The nightmares occur constantly and have a severe effect on the character's lifestyle.

## Red Tape

The character must negotiate his or her way through a complicated bureaucracy in order to accomplish tasks. This Disadvantage is often associated with characters who are members of law-enforcement organisations or similar government agencies that require paperwork. A large criminal organisation, however, may also require a character to receive permission from several levels of bosses before undertaking certain high-profile jobs.

Red Tape also includes whatever measures the character must take "after the fact" to appease the organisation to which he or she belongs. For example, a cop may need to fill out a report every time his or her weapon is fired or may have to follow a complicated series of steps to obtain a search warrant. A criminal may be required to pay a percentage of his or her take to the local crime boss or face some very strict penalties.

The Red Tape Disadvantage is usually inappropriate for characters created via the Flunkies or Servant Traits.

**1 CP:** The Red Tape only impedes the character before or after a major action (but not both) and/or the Red Tape is easy to manage most of the time.

**2 CP:** The Red Tape impedes a character both before and after a major action, and/or is difficult to manage most of the time.

**3 CP:** The Red Tape impedes a character before, after, and during a major action, and/or is extremely difficult to manage most of the time.

## Reduction

Linked to Trait. One of the character's Traits is limited greatly, resulting in a Reduction of its Point cost per Level. This Disadvantage offers a near-endless number of limitations, and consequently the player and GM should discuss the game ramifications and the Trait's new Level costs.

Unlike other Disadvantages, Reduction does not return Bonus Points to the character; the Trait cost changes instead. The Point cost change is directly related to the original cost of the Trait. For example, a Reduction that limits a 4 Points/Level Trait to half of its power might be a 2 Points/Level Reduction; the same limitation on a 10 Points/Level Trait could be a 5 Points/Level Reduction. This Disadvantage is not usually appropriate for 40 Point/Level Traits.

A list of suggested Reductions are shown below:

### Sample Reductions

- Trait always used in same way
- Fewer sub-Points awarded
- Less frequent usage
- Limited control
- One aspect
- Partial effectiveness
- Smaller target group
- Very specific utility

## Restriction

**Linked to Trait.** One of the character's Traits is associated with one or more disadvantages that limit its use. This Disadvantage offers a near-endless number of limitations, and consequently the player and GM should discuss the ramifications of the selected Restriction. A list of suggested Restrictions are shown in Table 9-3: Sample Restrictions.

The GM may increase the Bonus Points returned to the character to an alternate progression (such as **2 CP:**, 4 MP, 21 CP; or **3 CP:**, 21 CP, 9 MP) if the Trait this Disadvantage is restricting has a high Character Point cost at each Level (see Extra Attacks for example). Severe limitations on an Trait, which will affect the Point cost per Level, are covered by the Reduction Disadvantage.

**1 CP:** The Trait has a minor Restriction.

**2 CP:** The Trait has a moderate Restriction.

**3 CP:** The Trait has a major Restriction.

## Sample Restrictions

- Cannot use on oneself
- Check needed to maintain control
- During specific times of the day
- Easy to counteract
- Flawed results
- In particular locations
- Initiative penalty to use
- Limited functioning
- Loss of specific effect
- Naked form only
- Requires consumable focus
- Requires maintenance
- Requires special equipment
- Requires Ability checks
- Restricts movement
- Specific targets
- Time limit
- Under certain conditions
- Usage inflicts pain
- Use weakens character

## Severe Magnetic Signature

Unfortunately for your character, he generates a fairly potent magnetic field that causes all kinds of amusing trouble.

**2 CPs:** Your character sets off any metal detector, fixed or portable, regardless of whether or not he's carrying anything made out of metal. The problems this can cause are extensive, to say the least, especially if your character ever wants to travel incognito via commercial airlines. Furthermore:

- Your character cannot use a magnetic compass– it will always point to him, as long as it's within 10m (30 feet) of him.
- Your character suffers a -2 penalty to the Computer skill because his magnetic field makes computers behave strangely; and
- Your character has a 3 in 6 chance (per handling) or erasing any small magnetic storage device he touches, be it a computer disk or his driver's license.

**Limitation:** This complication may not be taken by baseline characters.

## Special Requirement

This Disadvantage forces the character to meet a Special Requirement before an action or task can be completed. The Special Requirement may involve a physical object, an event, an action, an environmental condition, or even a state of mind. Everyday activities, such as eating and sleeping, are not considered to be Special Requirements unless they must be carried out under unusual conditions or more frequently for some reason. This Disadvantage covers a wide range of possibilities, and thus the details should be discussed with the GM.

- 1 CP:** The Special Requirement is easy to obtain and/or needed infrequently.
- 2 CP:** The Special Requirement is difficult to obtain and/or needed often.
- 3 CP:** The Special Requirement is extremely difficult to obtain and/or needed constantly.

## Uncontrollable Power

Your character has a meta-ability that activates itself against his will when he touches the skin of another character. Any clothing thicker than a nylon stocking will prevent this contact from occurring, but your character must still be very careful– clothing can be lost or damaged.

**2 CPs:** Whenever your character touches the skin of another living being, the power in question has a 4 in 6 chance (non-cumulative) of activating in the fashion that will be most harmful to the touched character. If the power in question is a skill, the character must make an immediate skill roll (as a free action) and apply the results to the unfortunate subject.

**4 CPs:** As above, save that the power has a 100% chance of activation per contact.

**Limitations:** This complication may not be taken in conjunction with meta-abilities not listed in the Alteration and Command Power lists.

**Special:** This complication may be taken multiple times, for multiple powers, with the GM's permission. Each and every single one of those powers has a chance to take effect simultaneously if the character accidentally touches someone else.

## Unique Disadvantage

This section covers any and all possible Disadvantages that a character might possess but are not detailed in the rules. The boundaries and limitations of the Disadvantage should be discussed with the GM.

- 1 CP:** The Disadvantage occurs infrequently and/or has a slight effect.
- 2 CP:** The Disadvantage occurs frequently and/or has a moderate effect.
- 3 CP:** The Disadvantage occurs constantly and/or has a severe effect.



## Unique Disadvantage Example: Attack Restriction

A character with the Attack Restriction Disadvantage has limitations on whom he or she can attack due to a reduction of free will (such as “hard coded” commands). The attack restriction can only be overcome during exceptional circumstances and may result in harsh consequences, including unbearable guilt or punishment by superiors. This Disadvantage obviously does not apply to heroic characters who cannot “attack innocent people.”

**1 CP:** The character’s restriction applies to very few people, or the character has slight reservations.

**2 CP:** The character’s restriction applies to many people, or the character has strong reservations.

**3 CP:** The character’s restriction applies to a large group of people, or the character has extremely strong reservations.

## Unreliable Power

Your character has at least one power that does not always activate when he wants it to.

**1 CP:** Select one meta-ability that when the character attempts to use that power, there is a 1 in 6 chance (non-cumulative) that the power will not activate. The requisite number of power points will not be spent by an unsuccessful activation.

**2 CPs:** As above, save that the chance of non-activation is 3 in 6.

**Special:** This complication may be taken more than once. Each time it is taken, it applies to a different meta-ability.

## Unusual Obligations

Your character has been given the “honour” of shouldering a heavy burden of responsibility to his patron, ideal, pantheon, or appropriate controlling power.

**2 CPs:** From time to time, your character’s patron or controller will order him to undertake a mission or perform a specified activity. This might be a ticket to adventure, or an annoying intrusion into an adventure in progress. Your character’s patron or controller is disinclined to think of your character’s preferences or convenience.

**4 CPs:** The intrusions into your character’s life are both more frequent and more time-consuming.

**2 CP Special Handicap (Coercion):** Your character’s patron or controller is violently coercive when your character refuses to do that controller’s bidding— your character might immediately suffer anything from blinding headaches to total loss of power until he agrees to bend to his controller’s will.

**Limitation:** This complication can be very disruptive to an ongoing game involving other players, and should therefore be specifically approved by the GM. Baseline characters may not possess this complication.

## Vulnerability

Your character is unusually vulnerable to the harmful effects of one or more forms of attack. The following types of damage are options for selection:

- Sound/Vibration
- Acid/Corrosives
- Fire/Heat
- Ice/Cold
- Light
- Darkness
- Electricity
- Magical Energy

**2 CPs:** Your character takes double damage from damage sources of the chosen type, and suffers a -2 penalty to all saves against an effect or hazard of that type.

**4 CPs:** As above, save that your character also suffers 2d6 points of additional damage from his chosen damage source as well as a -3 penalty to all saves against an effect or hazard of that damage type.

**Special:** This complication may be taken multiple times. Each time it is taken, it applies to a different type of damage.

**Limitation:** This complication is incompatible with any sort of specific resistance or immunity to the damage type in question. Baseline characters may not possess this complication, unless it represents a common racial weakness.

## Benefits

**Benefits** are just the opposite of complications, in that they make a life of heroic adventuring somehow more convenient for your character. Unlike Traits (which represent intrinsic personal qualities or trained abilities), Benefits tend to reflect background concerns such as upbringing, resources, and equipment. Character may purchase Benefits during character creation by spending CPs.

Note that some complications and character backgrounds or classes may limit the nature of the Benefits that a character may possess— the GM has final authority over anything he deems to be inappropriate for any given character concept.

These traits are broken up into **Social** and **Physical** Benefits. Physical Benefits are noted as they are able to be copied/mimicked by the relevant super power. Social Benefits can't be mimicked, however successful disguise type powers or skills may take advantage of a social benefit while impersonating someone with such a benefit.

## Social Benefits

### Advanced

**Cost:** 2 Character Points

**Relevant Attribute:** Intellect

The character hails from a technologically advanced society by the standards of the dominant civilizations of the

setting. The character will have access to technology superior to most cultures (in some cases vastly superior). The character receives a bonus to appropriate skill rolls when he has access to tools or equipment incorporating advanced technology. The character's native culture may have a poor attitude and low tolerance for those from less advanced cultures, and/or may be unfamiliar with primitive technology and skills. Examples of characters with this trait include alien visitors from an advanced civilization, Atlanteans in the Victorian Era, and Interstellar Fleet officers who go back in time to visit 20th century Earth. Compared to the majority of the cultures in the game setting, the character's native culture has a +3 bonus to appropriate skill rolls when using advanced technology

## Allies

Allies (compare and contrast with Assistants, Connections, and Patrons, all described below) are NPCs willing to risk at least something on behalf of your character— whether they are true friends or simply allies of convenience, they have a vested interest in helping your character from time to time. Whether they know your character in his adventuring identity or his “civilian” identity is up to you. Allies generally ask for nothing in return for favours and information, so long as your character respects them and treats them well. On rare occasions, an ally might ask a favour of your character. Friendship is a two-way street, after all. Allies should be considered moderately vulnerable to the actions of other NPCs. As long as your character deals carefully with them and takes pains to expose them to as little danger or scrutiny as possible, they will be secure in their positions. If your character abuses his trust with an ally, or carelessly reveals that ally's identity to an enemy, look out! Your character may have multiple allies during character creation.

**2 CPs:** Your character's ally is fairly low on the totem pole of his chosen profession— he might be a beat cop, a rookie reporter, a small-time thug, a low-ranking military officer, etc.

**4 CPs:** Your character's ally is relatively well-off and well placed. He might be a police captain, a famous newspaper columnist, a crime boss, or a veteran military officer, for example.

**6 CPs:** Your character's ally is very well-placed and has a wide variety of powers and information sources. He might be a police chief, the most powerful mobster in the city, the editor of a major daily newspaper, or a flag-rank military officer, for example.

**8 CPs:** Your character's ally is at the head of a very, very useful organization or personal power base. He might be a director of a government agency, a global crime figure, a senator, or a senior military advisor with cabinet-level authority.

## Alternate Identity

Your character has constructed at least one false persona, in addition to his civilian identity and his adventuring identity. The usefulness and depth of this alternate identity both depend on how many CPs are invested in it.

**1 CP:** Your character's identity will withstand casual perusal — he has a fake mailing address, a well-forged picture ID, a false employment record, and even a small bank account.

**2 CPs:** Your character's alternate identity is far better developed. It includes a driver's license, passport, work permits, bank accounts, rent and property records, criminal records, and school records, all expertly forged.

**3 CPs:** Your character's alternate identity has a great deal of substantiating background evidence— photos, mementos, letters from fictional relatives, awards and plaques, school papers, and mentions in newspapers and other media dating back at least several years. Any private investigator or routine police inquiry would be absolutely fooled. Your character may have multiple alternate identities.

## Amazing Costume

Most player characters have to fret over the state of their costumes, checking them for the constant wear-and-tear that a life of adventuring entails. Costumes are regularly burned, shot, cut, boiled, and blasted off their wearers, and must be completely replaced— but not your character's costume.

**2 CPs:** Your character owns a nearly miraculous costume that is probably a great deal more survivable than he is. An amazing costume simply cannot be destroyed, damaged, discoloured, or distorted. It will re-size itself to the wearer's frame, keep itself clean, and allow itself to be worked or reworked when its owner (and only its owner) desires a change. The costume may contain whatever regular armour or materials the character desires, and it will add a +1 A.V bonus on top of the armour's regular protection. Any armour incorporated into an amazing costume gains its near-indestructibility (until removed or replaced). Although the costume cannot actually be affected by any force on earth, it will offer no special protection above and beyond its AV bonus to its wearer. For example, if the owner of an amazing costume is dropped into a vat of acid, he'll probably dissolve in short order, leaving an unmarried costume floating serenely on the surface of the acid. The origin of such a costume is up to the player.

## Assistant

Your character is aided in his heroic exploits by a close associate who helps the character organize his life and protect his secrets. Although called an “assistant,” this person is really more of a best friend, and might be a servant (butler, chauffeur, pilot, executive secretary, etc.), a relative (uncle, aunt, parent, etc.), or just about anything your character concept can accommodate.

**3 CPs:** Treat the Assistant as a **Realistic** Level Minion, with skills selected by you and approved by the GM.

**6 CPs:** Treat the Assistant as a **Cinematic** Level Minion, with skills selected by you and approved by the GM.

## Connection(s)

Your character has made a contact in a sector of society that can be of great assistance in his heroic career. A connection (compare and contrast with Allies and Assistants, already described) can be a source of aid and information, though it will balk if abused and will sometimes require something in return for its services. Unlike Allies and Assistants, connections feel no real emotional or moral link to your character. Each connection should be personified (For example, a connection to the local police might be directly represented by a friendship with a deputy commissioner or chief). Possible connections include (but are not limited to):

- 10 Local/State Police
- 11 The Mayor's Office
- 12 The F.B.I.
- 13 The Governor's Office
- 14 The Media (Newspaper, TV Station, etc.)
- 15 The Armed Forces
- 16 An Industrial Conglomerate
- 17 A Research Lab or University
- 18 The Street/Criminal Organization
- 19 A subculture

Generally speaking, a connection will offer his services for free once per adventure, and must be paid, intimidated, or cajoled for further services.

**1 CP:** A minor connection grants a complementary +2 bonus to skill rolls that are relevant to the connection's area of expertise.

**2 CPs:** A substantial connection grants a +4 bonus to skill rolls that are relevant to the connection's area of expertise.

**4 CPs:** A major connection grants a complementary +8 bonus to skill rolls that are relevant to the connection's area of expertise.

Connections may also be sent after the answers to specific questions, though they may take some time in getting back to your character with an answer.

**Note:** Bad things sometimes happen to a hero's connections. In the event a connection disappears, is incapacitated, or is killed, a new connection will usually replace it, but not immediately. These things take time to develop, often several weeks or months. The development of new connections can be sped up by the application of cash, goods, or favours

## Database/Library

Your character own a massive computer database or physical library, which he frequently consults.

**2 CPs:** A database or library offers a +2 circumstance bonus to each of three Knowledge, Profession, or Technical Group skills. A single skill may benefit from this bonus only once. At least an hour of study must be spent in the library to gain one of these bonuses for the next roll made with the skill in question.

**4 CPs:** As above, save that the database or library offers a +2 circumstance bonus to *all* Knowledge, Profession, or Technical Group skill rolls made following at least an hour of study.

**Special:** A player may negotiate with the GM for a special capability or focus for his database or library. For example, a crime fighting player character might wish to own a library of criminal files or a database that constantly updates the known locations and rap sheets of perpetrators. Such special functions are available only with the GM's explicit permission. See also the Mystic Library Benefit below.

## Fame

Your character is more famous than most of his peers are at a comparable level of experience.

**Variable Cost:** For every Character Point spent on this Benefit, your character may grant a +2 bonus to the Fame rating of any one of his identities.

**Special:** A baseline character receives a +1 bonus to any Recognition rating for every CP spent.

**Specialized Fame:** One or more of your character's identities is well-known within a certain relatively limited circle of people. For every Character Point spent on this Benefit, your character may grant a +2 bonus to the Recognition rating of any one of his identities within a specialized sector of society. Possibilities include but are not limited to:

- 10 Criminal circles
- 11 Subcultures (musical, ethnic, or lifestyle)
- 12 Professions (journalists, writers, computer programmers)
- 13 Fandoms or hobbies
- 14 Societal elites (the rich, the nobility)

## Global Contacts

**Cost:** 10 Points, +5 per additional Level

**Relevant Attribute:** Presence

**Progression:** +2 to TN with additional levels purchased.

A well-travelled or connected character can have the unlikely ability to make contact with an information source or minor ally wherever they go. The character can make a PRE attribute check against a base TN of 18 to be able to cross paths with a contact in any population center he or she visits. The GM decides on the usefulness of the Contact based on the type game and the situation. Depending on the Level purchased, most Contacts are relatively "Helpful" connections, but "Benevolent" connections can be contacted if the GM decrees. This trait is most appropriate for cinematic campaigns but has its place in lower level games if the concept is right. If there is no possible way the character could have a Global Contact in a particular situation, then the GM should not feel obliged to provide one.

## Global Traveller

**Cost:** 10 Points, +5 per additional Level

**Relevant Attribute:** Intellect

**Progression:** +1 to Educational Group and Area Knowledge Skill Score with additional levels purchased.

The character's world knowledge and experience gives him or her the ability to recall practical knowledge about a wide array of subjects. The character has a chance at a skill score of 1 (Novice if a Skill Type,

Amateur if a Skill Speciality) at applying some form of knowledge in any given situation. A classic example of this ability would be *Higgins* from the TV show “Magnum P.I.”

## Legal Enforcement Powers

Your character has been deputized by a legitimate law enforcement agency, and as a result has both the legal authority and the legal responsibilities of a sworn officer of the law

**2 CPs:** Your character has arrest and detention powers, search powers, and the power to use reasonable force (modified by the specifics of where and when your character was granted this authority, at the GM's discretion) within a single city-wide jurisdiction. Provided he behaves in an appropriate fashion, this can make his life a lot smoother than that of the average costumed adventurer. On the other hand, your character must respect the authority and operations of uniformed law enforcement officials, or his legal powers are history.

**4 CPs:** As above, save that your character's powers are granted by an agency of a national government, making an entire country his jurisdiction.

**Special Variant- Tacit Enforcement Power:** This variant costs no more or less than the standard Legal Enforcement Power. Your character's legal powers are a secret, to be revealed only when absolutely necessary.

## Minions

You have various subordinates who follow your orders. Minions hang around the character doing whatever he or she wants and never ask for anything in return. They can provide a character with more free time (“Got some more homework for you, my faithful friend....”), can keep the character safe from danger (“Quickly! Interpose yourself between me and that rabid wolf....”), or can simply make the character's life easier (“My shoe is untied. Fix it!”) Minions aim to please, even at their own expense. They are also known as groupies, stooges, or toadies.

For 1 Point/Level, the Minions are not warriors; they may get in the way of an enemy, or fight in self-defence, but will not attack. For 2 Character Points, the Minions will take up arms at the request of their master. For specific talented and loyal followers, see the Assistant benefit. Mercenaries whom the character hires for specific tasks are not Minions, since they have their own agenda and expect compensation.

Individual Minions are NPCs. A character's Minions normally have identical Attributes and Traits, although Skills may vary. A character may have Minions with varied Abilities or Attributes, but each one with a different set of Attributes and Traits counts as two Minions. A Flunky template should be built on 250 Character Points (plus any Complications).

**1 CP:** The character controls 1 flunky.

**2 CPs:** The character controls 2 minions.

**3 CPs:** The character controls 3 or 4 minions.

**4 CPs:** The character controls 5 to 7 minions.

**5 CPs:** The character controls 8 to 12 minions.

**6 CPs:** The character controls 13 to 20 minions.

**Loyalty Score:** Your Loyalty score is equal to 3d6 + PRE Attribute, modified by the factors listed below:

Character Attributes	Modifier
Fame trait	+3
Position of Power trait	+2
Wealth trait	+1
Displays special powers	+1
Provides equipment	+1
Moves around a lot	-1
Had suffered a well-known failure	-1
Unlucky Complication	-1

Regardless of Loyalty Score, leaders cannot have any minions with more total character points than the leader. Minions that are lost are replaced with new ones by the next adventure. Gamemasters may wish to limit the number of minions that player characters can have, or can have with them at any given time, to prevent adventures from becoming huge “crowd scenes.”

### Option: Genius Leaders

In the comics, leaders — particularly supervillains — often lead by benefit of their superior Intellect rather than their Presence. In this case, GMs may allow characters with the Minions trait to use their Intellect attribute rather than their PRE to calculate their loyalty score, if their INT bonus is higher.

## Mystic Library

Your character owns a small number of exceedingly old, fragile, and dated manuscripts that, when sorted out and examined in detail, might yield genuine mystical secrets.

**1 CP:** Your character's mystic library contains genuine information on 4 levels of spells, as secretly selected by the GM. The catch is that these manuscripts are decaying, disorganized, and written in a wide variety of archaic and foreign languages. Even when they are sorted out and partially translated, a mystic must still go through all the usual steps of identifying and translating arcane writings before he can attempt to write any of the spells into his spell book. A mystic library yields months upon months of aggravation and frustration before it yields its rewards.

**Special:** With the GM's permission, this Benefit may be taken more than once, granting an additional 4 levels of

spells of the GM's choice per CP spent.

## Organisational Ties (Ranks)

**Character Skill Point Cost:** 1-3 Points/Level

**Relevant Attribute:** Presence

**Progression:** Descriptive; see below

Organisational Ties represents a character's close relationship with a hierarchy of some sort that grants him or her access to respect and privileges. Monetary advantages are usually covered by the Wealth Trait, while access to special equipment may be represented by the Personal Gear Trait. Examples of organisations include the feudal system, powerful corporations, organised crime rings, secret guilds and societies, governmental positions, military organisations, and some religions. For campaigns in which all players belong to the same organised group, the GM may decide that Organisational Ties are not required. Consequently, this Trait is optional; the GM may prefer to treat organisation membership as a background detail instead.

The value of Organisational Ties depends on its importance in the setting. An organisation that exerts moderate power within the setting is worth 1 point/Level, one that has significant power costs 2 Points/Level, and one that has great power in the setting costs 3 Points/Level. Players should not assign this Trait to represent organisations that have very little power. The GM determines the extent of the organisation's influence. In a high school comedy campaign, the school's autocratic Student Council might wield "significant power," while in most other settings it would be completely trivial and not worth any Points. Similarly, a criminal organisation like the Mafia or Yakuza might count as "great power" (3 Points/Level) in a traditional low-powered game set in modern times, but merely as "moderate power" (1 point/Level) in a high-powered magical girl campaign.

Normal organisations should be limited to a geopolitical area, such as a single country. Global organisations, or those that span multiple geopolitical areas, function at 1 Level lower. Multi-planetary organisations function at 2 Levels lower, while multi-galaxy organisations function at 3 Levels lower. For example, the president of a global megacorporation needs to assign Level 6 to gain access to the Controlling Level category (1 Level lower). Similarly, a character who has Senior Level in a universe-wide military organisation should have Level 7 Organisational Ties (3 Levels lower). Some organisations may be ostensibly limited to a single country, but the higher Levels still have global or multi-planetary influence. For example, the President of the United States is a Controlling Level (Level 6). Since the US has great influence across the world, however, the position would be Level 7 (as if it was a global organisation).

These far-ranging organisation positions are only relevant, however, if the character can actually gain access to the resources of all branches of the group. If an Earth character is Connected to a multi-planetary police organisation, for instance, but can only interact with and be influenced by the Earth chapter of the organisation, the group is only considered to be a global organisation (1 Level lower) for that character. The group is not categorised as multi-planetary (2 Level lower), since the extensive resource benefits normally associated with an organisation that size are not available to the character.

- |         |   |
|---------|---|
| Level 1 | The character is connected to the organisation and can rely on it for occasional support and favours (and expect to be called on in return).  |
| Level 2 | The character has respected status in an organisation such as a landed knight in the feudal system, a junior executive in a corporation, a city council member, or a Mafia "Wise Guy" in an organised crime family. The organisation brings the character status and some wealth. |
| Level 3 | The character has middle Level in an organisation such as a corporate vice president in charge of a department, a lesser feudal lord with a castle and lands, or a Mafia "captain" who runs a neighbourhood, or a junior congressman or member of parliament.                     |
| Level 4 | The character has senior Level in an organisation, such as the senior vice-president of a large corporation, a high-ranking officer in the JSDF, or a US senator.   |
| Level 5 | The character has controlling Level in an organisation, such as the president of a megacorp, the boss of a large crime family, or a US state governor.  |
| Level 6 | The character has a controlling Level that spans multiple organisations, such as the ruler of a small nation, or "boss of bosses" of many different crime families.   |

## Own a Big Mecha (OBM)

**Cost:** 8 Points/Level

**Relevant Attribute:** None

**Progression:** Each Level adds 400 starting Mecha Points

A mecha is a vehicle or construct of some sort such as a giant robot, spaceship, tank, submarine, sports car, motorcycle, helicopter, powered armour suit. Piloting is usually done from a cockpit inside the mecha, though lower-technology or "retro" mecha may be operated from the outside or via remote control. The mecha's aptitude for combat is determined by the pilot character's ability.

Mecha often appear in modern or future settings, but they can also be pre-modern such as sailing ships or science-fantasy gear like magical clockwork golems. "Mecha" that characters do not ride, pilot, occupy, or wear, such as robot companions, are best acquired through the Flunkies, Servant Attributes or Pocket Monster Abilities.

The basic capabilities of the mecha are outlined in the Level progression chart. The exact details regarding the mecha's form, function, storage, and design are up to the player.

Each mecha design will cost a certain number of Mecha Points depending on its statistics and qualities. Mecha Points are an abstract representation of the qualitative value of the mecha. A character gains a number of Mecha Points depending on his or her access to resources as well as the character's importance in organizations — see the Mecha



## Patron

Your character receives financial support from a wealthy person or institution. This patron can provide him with a great deal of useful funding for his activities, but your character must be careful not to offend or upset his patron, lest his funds be reduced or cut off. He should also keep in mind the fact that a patron can be a great target for an enemy if the patron's involvement in his affairs is made too obvious. Compare and contrast with Allies, Assistants, and Connections— a Patron sympathizes with your character's goals, but cannot or will not aid him beyond financial support.

**2 CPs:** Your character's patron supplies him with the equivalent of a Personal Gear Benefit at Level 1. Initial funds (\$100,000) may be spent on equipment, vehicles, and lodging during character creation. Regular income (\$10,000) may be used however the character sees fit, so long as any expenditure is related to his heroic career.

**Limitation:** A character may not take this Benefit during character creation unless his own Gadget Power is 4 or less. If a character's personal gear benefit level ever exceeds 8, his patron will cease supplying him with funds, but will begin doing so once more if the character ever suffers financial trouble that drops his Personal Gear Level to 7 or less. This Benefit is incompatible with the Lone Wolf Complication and the Blue Collar Hero Complication.

## Perk

The character has some minor perk, such as an employee discount, free legal advice, or a license to do something that would normally be considered illegal (a right to collect taxes, hunt criminals, fire upon and loot foreign merchant ships and colonies, etc.). The exact nature of the perk is up to the player and subject to the GM's approval.

Perks that are conferred to members of a group are given to those with the Organisational Ties benefit, and need not be purchased separately. For example, a police officer has powers of arrest, the right to carry a badge and gun, and so on, all as part of his Membership in the police department. Similarly, a samurai has the right to wear the two swords (dai-shō), the symbol of his status, by virtue of having Membership in a samurai clan.

The cost for a Perk depends on its importance or significance in the campaign (GM's discretion).

The perk is of:

2 CPs: minor importance (e.g., a press pass, Confidential security clearance).

4 CPs: moderate importance (e.g., concealed weapon permit, Secret security clearance).

6 CPs: major importance (Letters of Marque, Top Secret security clearance).

## Personal Gear

**Cost:** 3 Points/Level

**Progression:** The character gains 1 major and 4 minor items of Personal Gear/Level

The Personal Gear Benefit represents a character's access to useful equipment. Characters do not need to spend Character Points for items that are legal, inexpensive, and mundane in the campaign setting (such as clothing, a backpack, a knife, or consumer goods). GMs may require players to allot Points to this Benefit, however, if their characters will begin the game with numerous pieces of equipment to which the average person might not have easy access such as weapons, body armour, or specialised professional equipment. The GM may give starting players a weapon of choice and a few other inexpensive items for free.

Personal Gear cannot include magic items, secret prototypes, or technology more advanced than what is standard in the setting. It can include common civilian vehicles appropriate to the setting (for example, a car, truck, light airplane, or motorbike in the present day; perhaps a horse for fantasy campaigns). For less common or more expensive mecha, see Own a Big Mecha Benefit. The GM always has the final say on whether or not an item is available to the characters.

Although characters may have items that are owned by the organisations to which they belong, they still must acquire these items as Personal Gear if they will make regular use of them (though the Conditional Ownership Complication may apply). Thus, a police officer would use Gear for a pistol, police car, or handcuffs, although these items are property of the police department. This rule is intended mainly for play balance and, naturally, the GM has final say on this issue.

Each Level in this Benefit permits the character to take one major and four minor items. Alternatively, the character can exchange one major item for four minor items, or vice versa. Use these guidelines to differentiate between major and minor items:

### Minor

The item is somewhat hard to get, or rather expensive. It is something available in a shop or store or from a skilled artisan, but it costs as much as an average person's monthly wage. Alternatively, the Gear can be less expensive but needs a license or black market contact to acquire. Non-standard items that modify or improve other items of Gear, but are not functional by themselves (for example, a scope for a rifle, silencer for a pistol, or supercharged engine for an automobile) are also minor items of Gear.

Modern examples of minor items include weapon and vehicle modifications, handguns, premium medical kits, night vision goggles, full camping gear, burglary tools, expensive tool kits, and personal computers. Ancient or medieval examples include swords, longbows, crossbows, shields, lightweight armour (such as leather or a light mail shirt), lock picks, poisons, or a mule. Gear must be appropriate to the world setting — a pistol is a minor item in a modern-day or future setting, but an Item of Power in a medieval fantasy game!

### Major

The gear is usually illegal for civilians, but it may be issued to an elite law enforcement agency, an average soldier, or a government spy may be issued. Modern-day examples of major items include machine guns, tactical armour, and grenade launchers. Major gear items can also include quite expensive but commercially available equipment such as a science lab, workshop, car, or motorbike. The GM can rule that an occasional, very expensive item (for example, an airplane or semi truck) counts as two or more major items of Gear. Ancient or medieval examples of major items include a full suit of chain or plate armour, a cavalry horse, a smith's forge, an alchemist's lab, or a wagon and team of draft animals.

## Mundane

Items that are easy to acquire, legal, and inexpensive count as “mundane items” and do not count as Personal Gear unless taken in quantity (GM's option). For example, “a complete tool box” would be a single a minor item; a single wrench is mundane.

## Position of Power

Your character enjoys a position (whether earned or inherited) of considerable social privilege and responsibility, typically in his civilian identity or an alternate identity.

**1 CP:** Your character might be an assistant professor at an educational institution, a low-ranking military or law-enforcement officer (rank equivalent to Sergeant), a very minor holder of a patent of nobility (baronet), or a minor local politician (city hall bureaucrat).

**2 CPs:** Your character might be a professor at an educational institution, a military or law-enforcement officer (rank equivalent to Lieutenant), a holder of a relatively minor patent of nobility (Baron or Viscount), or a local politician of some influence (city councilman, regional representative).

**4 CPs:** Your character might be a senior professor or important administrator at an educational institution, a major director of an institution such as a museum, a law-enforcement or military officer of some seniority (rank equivalent to Captain), a holder of a patent of nobility (Count or Earl), or a fairly powerful politician (mayor of a moderate-sized city, representative to a national ruling body).

**Note:** With GM permission, your character may purchase positions even higher than those listed, at prices deemed appropriate to the GM. GMs should be warned that positions of considerable power can be disruptive to an ongoing campaign and difficult to maintain in conjunction with a heroic adventuring career.

## Protected Identity

Your character has taken extraordinary steps to ensure that one or more of his alternate identities are separate and inviolate from his civilian identity. This often takes the form of forged but entirely legal and convincing documentation that your character's “civilian” identity has a medical problem (blindness, deafness, permanent disease or injury) that would rule him out as the suspected alter-ego of a player character. Your character will also have emplaced background information and possibly even character witnesses.

**1 CP:** Provided that your character never does anything so foolish as, say, de-masking on a live news broadcast, he can rest assured that *nobody* will be able to connect a protected identity with his civilian identity. Anyone attempting to do so without convincing evidence provided by a major error on your character's part will suffer a +6 addition to the TN of any related investigation rolls.

**2 CPs:** As above, save that the TN of any investigation attempt rises by 12. Only the most determined, zealous, and skilled investigators have any chance of penetrating such a level of obfuscation.

**Note:** This Benefit may be purchased multiple times and applied to multiple identities.

## Safe House

Your character maintains one or more rental properties (under an assumed name), hidden bolt-holes, or secure hideouts to which he can retire (or send others) in a time of need. It may be assumed that the character does not need to pay anything for each safe house (having taken care of that when he set each hideout up), and that their locations are totally secure unless the character allows himself to be traced or followed to one during the course of a campaign. A character may have multiple safe houses, and may even place them in multiple cities.

**1 CP:** The character's safe house is a small, seedy, relatively unremarkable place. Doors and walls will be relatively flimsy. Treat as a *studio apartment*.

**2 CPs:** The character's safe house isn't palatial (treat as an *apartment*) but it is clean and comfortably appointed with an emergency supply of food and water.

**3 CPs:** The character's safe house may be either larger (treat as a *suite*) or much more comfortable (apartment with elaborate environmental controls, water-beds, TV and radio, refrigerator, etc.) than the 2 CP version. Doors will be reinforced with several locks; windows may be barred and walls sound-proofed.

**4 CPs:** Furthermore, the character's safe house (treat as a *suite*) will have reinforced steel doors (disguised as ordinary doors), bulletproof windows and walls (an Armour Value 12), intrusion alarms, space for multiple concealed equipment caches, fire extinguishers, and a concealed emergency escape route.

## Secret Lair

Your character has a hidden base from which to stage his adventuring career.

**1 CP:** Your character owns or controls a secluded, defensible space (treat as a *Glorified Closet*), which has no ongoing maintenance cost. The exact nature and location of the space is up to you. The lair is clean and habitable but unfurnished unless the character wishes to spend his own money on furniture, equipment, and special features.

**2 CPs:** As above, save that the space should be treated as a *Bolt-Hole*.

**3 CPs:** As above, save that the space should be treated as a *Hideaway*.

**4 CPs:** As above, save that the space should be treated as a *Lair*.

**6 CPs:** As above, save that the space should be treated as a *Base*.

**Note:** Characters may also purchase secret lairs from their pool of liquid funds during character creation. However, not every hero with a secret base also has a great deal of cash laying around. It is for them that this Benefit is intended.

## Social Advantage

**Cost:** 1 Point/Level



**Relevant Attribute:** Presence

**Progression:** Skill rolls involving social interaction are at +2 per level.

The character is at an advantage in social situations and dealings with other people. This trait may be defined as the character being charming, smooth-tongued, exceptionally considerate, chivalrous, well-bred, courteous, or well-mannered. Alternatively, the advantage may be due to a particularly disarming personal habit that the character has, a "gift for gab," general charisma, or any other explanation that the player thinks up (with the GM's permission).

While it might seem minor at first glance, this trait can have very positive or beneficial consequences, depending on the culture. Wooing a wealthy patron, impressing His Majesty the King and gaining the favor of an influential member of an organization are all good examples of where this trait might come into play. With the right amount of preparation, this Benefit can temporarily increase the character's SOC attribute equivalent to the levels taken in this benefit.

## Wealthy

Characters are assumed to earn the average annual income for the game setting. Characters with the Wealth advantage earn substantially more money than average. Characters with wealth may have high-paying jobs or be independently wealthy. This advantage may also describe characters that own expensive property or those with millions of dollars invested in stocks or other funds that can be converted to liquid capital on short notice. It is up to the player to define the reasons and circumstances for his character's financial situation.

Financially the character is:

**2 CPs:** Well to do, earning 5x the average income

**4 CPs:** Upper class, earning 10x the average annual income

**6 CPs:** Filthy rich, earning 1,000x the average annual income

## Physical Benefits

### Ambidextrous

Using your off hand normally incurs a -3 penalty to the character's skill roll (see *Off Handed*). Ambidextrous characters can use the off hand with a reduced penalty or no penalty at all, depending on the level of the benefit. The character is able to use his off hand at:

**2 CPs:** only a -1 penalty

**5 CPs:** no penalty

### Animal Affinity

Various Animal Groups like the character. They would never harm nor attack the character unless severely aggravated. The character always seem to attract whatever animals in the group that are common to the area, and they will bias towards the character's side. This isn't a language ability, however, and they may not necessarily do what the character asks them to. Examples of animal groups are, Birds, Fish, Rodents, Cats, Dogs, Aquatic Mammals and Reptiles. Characters with this ability has Animal Handling as a Universal Skill.

**1 CP:** For every Animal Group

### Art of Distraction

Art of Distraction may represent oratorical ability, innate Presence, or even a beautiful or resonant voice. This Trait allows a character to distract a number of people or animals at a critical moment, provided he or she has some method of communicating with them (for example, talking, dancing, television broadcast, illusionary image, written word, etc.) If the character is trying to directly distract a potentially hostile group, such as an angry mob or a group of security guards, his or her Level dictates how many people are distracted. If the character has an audience that is already prepared to listen, the Level determines the percentage of that audience that is distracted or moved enough to take action, whether that involves buying the character's next CD, donating money to a charity, or voting for the character in an election. If multiple people with this Trait work as a team, the total number of people distracted is added together. Presence is used both when distracting people physically (for example, with sex appeal) and when distracting someone through emotion, rhetoric, or force of personality.

**1 CPs:** The character can distract one individuals, or 5% of an audience will be motivated.

**2 CPs:** The character can distract up to two individuals, or 10% of an audience will be motivated.

**3 CPs:** The character can distract a small crowd (1-10 individuals), or 20% of an audience will be motivated.

**4 CPs:** The character can distract a medium crowd (11-50 individuals), or 50% of an audience will be motivated.

**5 CPs:** The character can distract a large crowd (50-5 individuals), or 75% of an audience will be motivated.

**6 CPs:** The character can distract a very large crowd (5-1000 individuals), or 95-100% of an audience will be motivated.

### Attractive

The character is exceptionally attractive and others take notice, to the character's advantage. An attractive person receives a bonus on all skill rolls involving situations in which his or her feature is important (GM's discretion). This trait could impose a penalty to skill rolls in certain situations, such as interaction with individuals or races that find the feature unappealing, at the GM's discretion.

**1 CP:** For each +2 bonus to skill rolls which involve situations in which his/her appearance is important.

### Art of Command

The character possesses a natural knack for leadership. This Trait is similar to Art of Distraction, except it only works on allies or subordinates or possibly with leaderless individuals looking for guidance (such as ordinary people caught in an emergency). Instead of distracting them, the character is able to inspire allies or neutrals into following him or her into

dangerous situations that they might otherwise avoid. Simply because a character is in a position of authority over other people does not automatically imply that he or she possesses the Art of Command. In a military structure, subordinates will usually follow most orders (even dangerous ones) without hesitation because it is part of their job. Art of Command reflects a character's almost unnatural ability to inspire others to engage in actions that few people would ever consider undertaking. Note that few leaders have an Art of Command sufficient to inspire their entire force at once. Commanders usually concentrate on key individuals (such as immediate subordinates) and hope the actions of these people will encourage others to follow them.

- 1 CP:** The character can inspire one person.
- 2 CPs:** The character can inspire up to two people.
- 3 CPs:** The character can inspire a small team (1-10 people).
- 4 CPs:** The character can inspire a medium team (11-50 people).
- 5 CPs:** The character can inspire a large team (50-5 people).
- 6 CPs:** The character can inspire a very large team (5-1000 people).

## Autonomic Control

With this trait, a character can modify their normally unconscious bodily functions in unusual ways. After a moment or two of preparation (1d6 turns) the character can hold their breath longer, lower the heart rate, keep their cool, and shrug off the natural effects of sleepiness or drowsiness. The character keeps a cool head under moments of stress or intense emotion. Under such circumstances, the character receives a bonus to offset any penalties or increased difficulty for any skill rolls due to stress, distraction, or intense emotions such as anger or fear. The character is able to withstand pain exceptionally well, and receives a bonus to skill rolls to resist torture or extreme pain, and suffers reduced penalties due to wounds (see *Wounds and Effects of Damage*). It gives the character appropriate bonuses when HLT rolls come into play, the value of the bonus is interpreted by the GM given the conditions. This trait also can modify INT rolls when trying to remember or focus on something locked in the character's memory. It does not provide protection against psionic attacks, diseases or poisons.

- 2 CPs:** +2 Bonus to rolls against various Target Numbers per Level.
- 4 CPs:** +4 Bonus to rolls against various Target Numbers per Level.
- 6 CPs:** +6 Bonus to rolls against various Target Numbers per Level.

## Body Weapon

The character can turn a physical attack or appendage into a Penetrating/Lethal attack rather than the normal Blunt/Stunning damage. This can represent some form of martial art technique, natural bone structure or "mind over matter" talent. Penetrating attacks ignore TGH but are susceptible to the protection of armour.

*For example a character with a martial art technique called "Shin Kick of Doom" and a STR attribute of 8 would be able to inflict kick damage of 4d6+2 of P/L damage. A punch with a STR of 4 would normally inflict 2d6 B/S damage, but with a "Pointy Bone Knuckles" body weapon, damage would negate Toughness and reduce the target's LIF points by 2d6.*

- 2 CP:** per Attack type or Appendage

## Cosmetic Changes

A "Level 0" option of the Alternate Form Power is also available as a trait. This Level allows a character to undergo cosmetic changes that confer no additional abilities on the target. This includes: a 10% size increase or decrease, change of gender, 50% age increase or decrease, colour changes (eye, skin, or hair), and minor physical changes (shape of ears, facial features, or bodily proportions). A non-meta-powered version of this trait could be purchased as an extraordinary disguise capability to give the character the skill to alter their appearance quickly.

- 2 CP:** for each cosmetic change.

## Danger Intuition

**Cost:** 2 Points/Level

**Relevant Attribute:** Varies

**Progression:** TN 12 for the first level; +2 for every additional Level purchased

The character has a preternatural sense of danger to themselves only. This can represent a mystic sense, street smarts, *zanshin*, or whatever the player wants it to represent. Whenever that character is in immediate danger, the GM makes a secret WIL + Intuition roll for that character. The difficulty of the roll depends on the level of the trait. If the roll is successful, the character becomes aware of the danger, though some details may remain a mystery. Once aware of the danger, the character gets one free turn to perform one or more actions and has no penalty for surprise. A character's danger sense can be annulled in some way that depends on the trait's concept. This should not happen often, but players should be aware that there is the possibility. If the effect number of the character's WIL+ Intuition roll is 6 or higher, the character knows the precise direction and the general distance of the threat. If the effect number is 12 or more, the character knows the precise distance and nature of the threat.

## Distance Calculation

**Cost:** 1 Point/Level

**Relevant Attribute:** Intellect

**Progression:** +2 to TN and +1 to skills per Level.

Characters can calculate, with various degrees of accuracy, the distance from their current location to another landmark. The distance between two noticeable landmarks may also be estimated within reason. The ability could save the character navigation time by calculating better routes. Risks in travelling through dangerous terrain (for in-depth descriptions see the [Appendix C: Terrain](#)) can be calculated with this ability. Estimating distances is rolled against a

Target Number of 15 and relevant skills get a +1 bonus at Level 1.

## Disease resistance

**Cost:** 2 Points/Level

**Relevant Attribute:** None

**Progression:** bonus of +1 per level to HLT checks

Characters with this ability have a bonus to resist the effects of toxins or diseases.

## Eidetic Memory

The character has a near-“photographic memory” and retains much more information than the average person. The character rarely forgets anything he sees, hears, or reads. In addition, the character receives a +2 bonus/Level on any skill rolls involving memory (at GM’s discretion).

**1 CPs:** The character can recall important details.

**3 CPs:** The character can recall minor details.

**5 CPs:** The character can recall trivial details.

## Environment Acclimatization

**Cost:** 1 Point/Level

**Relevant Attribute:** Varies

**Progression:** Gives a bonus of +1 per Level to Attribute or skill rolls when subjected to physical conditions of a certain type of environment (select one) as described in the [AV section on page 102](#).

An example would be a +1 to the HLT check in high temperatures.

## Extra Defensive Action

This Trait reflects the character’s ability to use every defensive combat situation to his or her benefit. Each Turn, the character may make an additional defensive or non-combat action at no penalty to the existing action being taken that turn.

*For example Gunmetal has a bead on the bad guy with both his pearl-handled, auto compensating “HellPistoles” and in this turn he intends to fire. However, while the player awaited his turn in order for INI rolls, a grenade lands at Gunmetal’s feet! In a feat of John Woo trademarked action, Gunmetal isn’t about to lose his chance to fire on the bad guy and dives for cover while turning in mid air and firing at his target.*

**10 CPs:** For every action taken while also on the defensive.

## Extra Offensive Action

This Trait reflects the character’s ability to use every combat situation to his or her benefit. Each turn, the character may make one or more additional offensive actions without the normal multiple attack penalty (see [More than one action on page 85](#)), provided that the attacks are all similar in nature (for example, all hand-to-hand, all ranged, etc.) Also, unless two or more opponents are very close together, armed or unarmed hand-to-hand attacks must target the same person. The attacks may either be carried out at the same time during the character’s single Initiative or “held back” until the end of the Turn as a ‘free shot’ provided the character isn’t suffering the effects of from any attack against him or her (e.g. knocked back by a steel girder)

**10 CPs:** For every additional attack action per turn at no penalty.

## Extra Movement

This Trait reflects the character’s ability to use movement actions to his or her benefit. Each Turn, the character may make one additional movement action at no penalty. Offensive or Defensive actions can be made either after the initial movement or after the extra movement. Extra movement does not give the character extra actions in a turn but allows extra flexibility to his or her movement by splitting up that speed in the turn. The line of movement is fairly limited to 60 degrees from start to finish (the equivalent to a hex face).

*For example, a character moving at their standard MOV could move cautiously, attack, then move cautiously again. Alternatively, a running character moves their standard MOV first, attacks, and has the option of moving cautiously or another standard movement.*

**4 CPs:** To split up the movement in a turn.

**8 CPs:** To split up the movement in a turn and also change direction to any angle.

## Fast Draw

Characters are able to draw a one-handed weapon in an instant. Fast draw is applicable to actions such as drawing and firing a gun or unsheathing and throwing a knife but also help in sleight of hand tricks. When performing a fast draw in combat, the character receives a +2 INI bonus for that turn. After the fast draw is performed combat proceeds normally until an occasion is needed where the weapon is sheathed again and there is a race on to bring weapons to bear. Sleight of hand tricks have a +2 skill bonus also.

**2 CPs:** for a once only purchase of Fast Draw.

## Fast Healer

**Cost:** 2 Points/Level

**Relevant Attribute:** Health

**Progression:** The character heals one step faster on the time chart per level.

The character heals more quickly than normal. Determine the normal rate of healing for the game (see *Healing*), and then apply the modifier listed for the appropriate level of the trait. For example, if characters normally heal a number of

points of damage equal to their HLT every month, then a character with this trait at the Edge level would heal the same amount of damage every day. This trait can represent mystical healing, a cyborg's nanotechnology, regeneration, an alien physiology, and so on. This trait applies to all forms of healing. First Aid skill rolls to aid the character are normal.

## Fast Learner (Skill Group)

**Cost:** 2 Points/Level

**Relevant Attribute:** Intellect

**Progression:** The character's bonuses to skill rolls involving research, study or instruction are +2 per level.

The character is a quick learner, and is able to retain knowledge more readily than the average person. A fast learner can improve any skills from a specific skill group and also receives a bonus to skill rolls involving research, study or instruction on a topic relating to that skill group.

The player must choose the skill group to which this advantage applies when the trait is purchased. This trait may be purchased multiple times, once for each skill group.

## Features

The character possesses one or more secondary abilities that grant useful but mundane, non-combat related benefits. Features are typically possessed by non-humans and reflect various, minor biological or technological benefits.

*Examples of racial features include homing instinct, longevity, moulting ability, a pouch, scent glands, secondary eyelids, etc. Examples of technological features suitable for building into cyborgs, robots, or androids include diagnostic equipment, gyrocompass, modem, radio, self-cleaning mechanism, etc.*

A wide range of other Traits or Powers cover other more useful features such as gills, wings, fangs, and enhanced senses.

**2 CP:** per Feature selected

## Good Sense of Time

The character has an innate ability to tell time, even without a clock. The character always knows what time it is with incredible accuracy. Jet lag will not affect this character as they are attuned with the time enough that his or her circadian rhythm will re-balance after an hour.

**1 CP:** Can innately sense the time to the minute

**3 CPs:** Can innately sense the time to the second

**5 CPs:** Can innately sense the time to the thousandths of a second

## Immunity

With this Character Trait, the character is completely immune to damage and adverse effects that stem from a particular weapon, element, application, or event. For example, a character with 10 CP Immunity to silver cannot be hurt by silver weapons and will not feel pain if clubbed with a sack of silver dollars. Similarly, a character with 40 CP Immunity to fire/heat could walk into the most intensive fire-storm possible and emerge unscathed.

**5 CP:** The Immunity plays a small role in the game. Typical examples include: weapons made from a rare substance (such as gold, silver, or adamantite); attacks from a specific opponent (such as a brother, single animal type, or oneself); under specific conditions (such as in water, one hour during the day, or at home).

**10 CP:** The Immunity plays a moderate role in the game. Typical examples include: weapons made from an uncommon substance (such as wood, bronze, or iron); attacks from a broad opponent group (such as demons, or animals); under broad conditions (such as during the night, on weekends, or in holy places).

**20 CP:** The Immunity plays a large role in the game. Typical examples include: electricity; cold; asphyxiation; a specific weapon type (such as daggers, arrows, or rapiers).

**30 CP:** The Immunity plays a major role in the game. Typical examples include: fire/heat; a broad weapon type (such as swords or clubs); mental attacks.

**40 CP:** The Immunity plays an extreme role in the game. Typical examples include: gunfire (including forms of artillery); bladed weapons; unarmed attacks.

**50 CP:** The Immunity plays a primal role in the game. Typical examples include: weapons; energy; blunt trauma.

## Lightning Calculator

**Cost:** 1 Point/Level

**Relevant Attribute:** Intellect

**Progression:** +1 to appropriate skills per level.

The character can mentally perform complex mathematical equations without using any physical aids. Will allow the character bonuses to perform skills requiring mathematical solutions, such as navigation, missile target locks, chemical analysis and other GM approved situations.

## Lucky

**Cost:** 3 Points/Level

**Relevant Attribute:** Intellect

**Progression:** At the start of each game session, the character receives 1 extra Action Point per level.

The character is luckier than most. Even small misfortunes have a way of turning into advantages for the character. This trait can reflect a divine blessing, good karma, plain old-fashioned luck, or anything the player wishes.

In game terms, the character receives extra Action Points at the start of each game session. These extra Action Points do not count against the normal 3 AP starting limit for game sessions (see *Action Points*).

## Mechanical Aptitude

**Cost:** 3 Points/Level.

**Relevant Attribute:** Intellect

**Progression:** Descriptive; see below

**Suggested Campaign Level:** High Powered Game and above

The character possesses a natural mechanical aptitude for piloting and mechanics. Depending on the ranking of the Ability, the character may just be a natural operator of machinery or a wizard mechanic where no problem is too big to fix. If a skill complements this ability (i.e. already possesses an equivalent level in operating an automobile) then add +1 to the TN. It should be noted that this ability, while designed for repairing and piloting vehicles, does not give the character the abilities necessary to build fantastic machinery from scratch. Mechanical Aptitude relies on having the machinery there for the character to touch. Game Masters should also note that even a farmer, who finds and repairs an alien vessel and then takes off into space, would not actually be able to read the alien control panels to set a hyper-jump navigation point. This ability is raw mechanical talent and doesn't give any bonuses to computer skills. Another example is that someone, who can pick up a rifle and know at an expert level how to fire it, doesn't automatically know army rifle drills and safety training drummed into a soldier since the recruit stage. A character that jumps into an airplane and takes off would probably have violated every single rule in the Air-Safety Regulations Handbook. It is this reason that Mecha Combat skills will never be as natural as Mecha Piloting skills because combat is based on training and experience.

Characters can retain their INT in recent aptitude experiences. This means that a character with an INT of 4 can remember and return to the last four objects he or she used the Mechanical Aptitude ability with and not require the time period to learn.

- Level 1 The character can learn the operation of any vehicle of a particular type to an experienced level after 1d6 time periods operating it. The campaign realism level will determine if the time period is hours, minutes or seconds. Vehicle types include: Land Vehicles, Robots, Water Craft, Air Craft, Space Craft or Interstellar Craft. Mecha Combat skills are limited to trained level for mecha that the character has no prior experience in.
- Level 2 The character can learn the operation of any vehicle they begin operating to an experienced level after 1d6 time periods operating it. Mecha Combat starts at competent level but after each battle the skill level increases to a peak of Expert level.
- Level 3 The character can pilot as per level one and also learn to fix any machine to a competent level just by concentrating on repairing it. See the tables on [page 182](#) for repair times.
- Level 4 The character is adept at fixing any sort of machine just by placing their hand on the casing and diagnosing the problem immediately. Repair times are half what is presented on [page 182](#).
- Level 5 Characters can use any piece of equipment they put their hands to an expert level. Piloting is done at an expert level as is equipment repair. Repair times are half what is presented on [page 182](#).
- Level 6 The character knows the mental schematics of any piece of machinery he or she touches. Piloting and repairing any craft is at Expert levels and at a third of the time taken on [page 182](#). Mecha Combat skills are at competent levels.

## Night Vision

The character is accustomed to seeing in low light or even no light at all (depending on the level of the trait), and suffers no penalties to sight-based Awareness rolls in these conditions. Unlike the Blindsight super power the nightvision trait is a visual ability based on the light spectrum.

The character can see normally in:

1 CP: starlight and/or moonlight (cat's vision)

2 CPs: near-total darkness with ambient ultraviolet light (e.g., infrared vision, night vision goggles)

a ability roll 3 CPs: absolute total darkness, such as in a sensory deprivation tank (e.g., true thermal or "heat" vision)

## Operate Mecha on Willpower

**Cost:** 3 Points/Level

**Relevant Attribute:** Willpower

**Progression:** Each Level allows the mecha to be operated 10 HITs beyond zero for the pilot's Willpower

Attribute in Turns

When a mecha is reduced to 0 HITs or less, it is disabled. Although it might be repairable, it ceases functioning. A character skilled in operating a mecha, can keep it running on the equivalent of sheer willpower in the event of disabling damage occurring.

The mecha will keep operating for the duration dependent on the ranks in this Ability and the character's Will Attribute. The drawback to this ability is that the mecha takes twice as long to repair than normal if the operator has kept the systems going past 0 HITs. If the mecha takes more damage while being operated in this state, the Armour Value is halved meaning damage is inflicted much more harshly. If the mecha is not in combat and the pilot is still trying to nurse the mecha home at negative HITs, then the duration is extended to minutes instead of turns with a WIL attribute check starting at a TN for every negative HIT Point (i.e. a mecha with -10 HITs has a TN of 10). For every additional roll to keep the mecha together outside of combat, add an additional +1 to the TN. Of course if the mecha is damaged to twice it's HITs then the mecha is totally destroyed.

## Psychic Awareness

Characters can sense the use of mental powers in their presence. When a mental power is used near him or her or to affect someone near them, characters may be able to detect it. Make an awareness check (TN 12). If successful, the character senses the use of the mental power. The TN of the check increases by +1 for every 3 meter (10 ft) distance between the character and the user or the target or the mental power (whichever is closer).

**2 CPs:** If targeted by a mental power, a successful awareness check allows the character to know the identity of their



attacker (if familiar with them).

## Special Movement

This benefit lets the character perform unusual stunts like running over water, etc. GMs may also develop a selection of other special movement traits. Unless otherwise stated, the character moves at their normal movement attribute.

**5 CPs: Cat-Like.** The character will take half damage (round down) from most survivable falls and always lands on his or her feet.

**3 CPs: Light-Footed.** The character can skim over sand, snow, or ice at full speed.

**4 CPs: Slithering.** The character can slither along the ground at normal walking/running speeds. This allows a character to move quickly while maintaining a very low profile.

**4 CPs: Swinging/Brachiating.** The character can swing through forests and cities (areas with natural or artificial structures above swinging height) using vines/ropes/webbing or simply his or her arms.

**5 CPs: Untraceable.** The character never leaves footprints, tracks, or a scent when he or she walks or runs.

**5 CPs: Wall-Bouncing.** The character can move at regular walking speed without touching the ground by bounding back and forth between nearby vertical surfaces (walls). For example, he or she can proceed down hallways or climb an alleyway between two buildings (bouncing from wall to wall).

**10 CPs: Water-Walking.** The character can run over water as if he or she were on land. This counts as two Special Movement Levels

**10 CPs: Zen Direction.** When the character opens his or her mind to the natural world, he or she will always move in the “right” direction. The “right” direction is not always the desired direction, however.

## Speed Reader

**Cost:** 2 or 5 CPs

**Relevant Attribute:** None

**Progression:** The character read at 10x normal speed – 2 CPs (e.g., can read a novel in an hour) or 100x normal speed – 5 CPs (e.g., can read a novel in a minute) depending on the levels purchased.

The character can read at a faster than normal rate and retain as much information as someone who reads at a “normal” rate.

## Well Rested

**Cost:** 1 Point/Level

**Relevant Ability:** None

**Progression:** The character can get the equivalent of a full night's rest with 5 total hours -1 CP or more of sleep in a day, 2 total hours – 2 CPs, or no rest at all - 3CPs (doesn't need to sleep) depending on the levels purchased.

The character can get to sleep more quickly and easily than the average person, even in adverse or unusual conditions. In addition, any rest the character gets is deep and refreshing, allowing the character to avoid the effects of fatigue from lack of rest. Characters with this trait can get the equivalent of a full night's rest in a much shorter time than normal (normally 12–HLT hours of sleep). Any time that the character spends in deep rest or sleep throughout a day is added together for purposes of determining if the character is “well rested.”

## Voice Alteration

**Cost:** 1 Point/Level

**Relevant Ability:** None

**Progression:** +1 to the relevant skill scores or Target Numbers for voice use.

This ability allows the character to modify the tone and volume of his or her voice. The directional whispers can be clearly audible without the risk of eavesdropping; a shout can be heard in noisy surroundings or over large distances at a base TN of 18 where normal characters would not have a chance of accomplishing these feats. Voice Alteration cannot cancel other super abilities that affect sound. This trait can be used to modify such skills as orate, ventriloquism and mimicry, as well as singing, negotiation, acting and even animal handling.

## Problems with Traits?

Applying super power problems to character traits is certainly possible. Each problem selected for a trait deducts from the CP cost of the trait. Problems that refund more than 1 CP also reduce the cost of the trait by the same margin.

# PowASsembler! Preview

Although some heroes and villains rely on nothing more than their talents and (often considerable) skills, most are set apart from the rest of humanity by their super-human powers. Characters may be able to lift tanks, fly through the air, throw lightning from their hands, shoot lasers from their eyes, or any number of other amazing things. The power to do these things comes from the *meta-abilities* (or simply *powers*) described in this section.

Note that the PowASsembler **Supplement** will go into the choosing and creation of Meta-Abilities.

## Acquiring Meta-Abilities

Characters spend some of their character points to get levels in various powers, much like acquiring skills or other attributes. *ASsembler Core A/S* characters can acquire their powers in two ways. Players can individually choose from the powers given the Meta-Abilities Supplement **and they can also use the Power Groups system.**

## Choosing Powers

The **Power Descriptions** section offers a large selection of meta-abilities players can simply choose from for their characters. They pay the power's cost per level as given in its description from the character's available character points, modifying the power's cost according to any modifiers applied to it. Characters cannot have more levels in a power than their power level. The Gamemaster has the right to refuse to permit certain powers in the campaign, or to modify how some powers work to better suit the campaign.

## Power Costs

Each meta-ability has a cost in character points. This cost is per level of that power. A meta-ability never costs less than 1 character point per level and may cost 10 character points or more per level. A power's cost is based on what it is capable of doing, the more powerful and broad the power, the greater it's cost.

## Modifiers

Three things can modify a power's cost. These are power traits, tweak, and problems.

**Power Traits:** Associated with a particular power, power traits allow the power to be used in a different way, or grants a bonus when using a power in a particular way. Power traits, when acquired cost 2 character points each. A character must be able to use a power in order to use any of the power's stunts. If the power is reduced or inoperative, then none of the stunts are usable, either.

**Tweaks:** A tweak expands the capabilities of a power. A tweak increases the power's cost per level by 1 character point.

So a power with a cost of 4 and one tweak has a cost of 5 character points per level. Two tweaks increase it to 6 points, and so forth. Some tweaks can be applied to the same power multiple times increasing the power's cost each time. There's no limit to how high tweaks can increase a power's cost, although the GM may choose to limit certain tweaks, just like certain powers.

**Problems:** A problem is the opposite of a tweak, reducing a power's capabilities. Problems decrease the power's cost per level by 1 character point each, but never to less than 1 character point per level. So a power with a cost of 3 and one problem has a cost of 2 points per level. Additional problems would not reduce the power's cost (since it's already a 1 point per level). Problems can often balance the expense of adding tweaks. There is no limit to the number of problems a power can have, but the cost cannot be reduced below 1 point per level, regardless of the number of problems.

## How Meta-Abilities Work

Using meta-abilities is a fairly simple matter. Some powers work automatically, with specific effects given in their descriptions. Other powers — particularly those that affect other people — require some effort to use and an ability roll. Powers that affect others also allow a saving throw against their effects.

## Ability Rolls

In some cases, characters may be required to make an ability roll to determine how well a power works. A ability roll is just like any other roll in the game: roll 3d6, plus the power's level, plus any applicable modifiers, against a Target number set by the GM. Unlike skill rolls, power modifiers are not added to ability rolls. The results of various ability rolls are described individually in this section. Power roll = 3d6 + power level + modifiers vs. Target number or Opposed Power rolls

In some cases, usually when one meta-ability is used directly against another, an opposed check is called for. This is handled the same way as opposed checks for skills (see p. XX) except an ability roll is used in place of a skill roll. The character with the higher result wins the contest.

Description	TN	Ability Roll examples
Average/Easy	12	Standard use of the power without any outside interference
Tricky	15	Standard use of the power with some interference
Challenging	18	Standard use of the power while under heavy interference
Difficult	21	Non-Standard use of the power to achieve an effect not normally produced
Demanding	24	Non-Standard use of the power to boost the power's normal effect
Extreme	27	Non-Standard use of the power to double the power's normal effect
Legendary	30	Some extreme use of the power to achieve a nearly impossible effect.

## Speed and Duration

A meta-ability requires a particular amount of time to use. Some may require a full turn or even longer. See the Combat Section for details about the different types of actions. Each power also has a default amount of time that it lasts, which may be changed by Tweaks or problems. The Action is described as the Speed/Duration.

## Speed

- **None:** Using the power does not require an action or any conscious effort on the character's part. This is generally only the case for continuous or permanent powers, and continuous powers still require a free action to activate or deactivate.
- **Reaction:** Characters can use the power at any time in response to something else, such as an attack. Characters must still be capable of taking an action (not stunned, for example) in order to use the power. Character's DEF remains unchanged for the turn.



- **Free:** The power can be enabled at any stage within the turn. This may be a held action or part of an aborted attack depending on the character's initiative that turn. The character may be moving but the power can be used without penalties (unless striking a target).
- **Half:** This power is usable while the character is moving and is subject to the usual penalties to hit. If the character does not actually move during his action then it is feasible that another half action could be taken at a -3 TN penalty. He can also move cautiously as part of the turn without penalty.
- **Full:** Using the power is a full-turn action. The character cannot do anything other than use the power that turn. The Character's DEF has a -4 penalty while using this ability.

## Duration

1. **Instant:** The power's effect occurs and ends in the same action, although its results may linger. Most attack powers are instant; the effect happens immediately, although it may take some time for the target to recover. This is also true of alteration effects.
2. **Concentration:** The power lasts for as long as characters concentrate on maintaining it. Concentration is a half action (see the Concentration skill, p. XX, for details). Characters can't use other powers while concentrating on maintaining one. Once their concentration lapses (either voluntarily or because of a failed Concentration check), the effect ends.
3. **Sustained:** The power lasts for the entire turn and requires that the character be stationary or moving at a cautious speed. Characters are committed to the power use even if they fail the target number.
4. **Continuous:** The power lasts for as long as characters wish, without any concentration or effort on their part. Once activated, it stays that way until characters deactivate it.
5. **Permanent:** The power is always active and cannot be turned off, even if characters want to.

## Range

Each power has a default range, which may be changed by Tweaks and problems.

- **Personal:** The power works only on characters.
  - **Touch:** The power works on anyone or anything characters can touch. Touching an unwilling subject requires an unarmed attack roll against the subject's Defence
  - **Normal:** The maximum range of the power is based on its power level  $\times$  30m (100ft). So a normal range power bought up to level 10 has a maximum range of 300 meters (1,000 feet). A ranged power suffers the same penalties for ranged combat as shown in the **Combat Modifiers on page 88**. A range increment is a useful mechanic in resolving some game situations. The increment is a tenth of the maximum range. There are ten range increments in the normal range.
  - **Sight:** The power works on any target in their line of sight. If there are any obstructions between characters and the target or the target has complete cover, the power does not work.
  - **Special:** The power's range is defined in its description.

## Doing Damage

Unless otherwise stated, a super power which inflicts damage follows the following formula:

**Power Level  $\times$  1d6**

This means if a Power is bought to the 6<sup>th</sup> power level and inflicts damage then the damage rolled is 6d6. The individual power will demonstrate which Type and Form of damage is inflicted.

The three basic Forms of damage are Stunning (S), Lethal (L), and Special (Sp).

The three basic Types of damage are Blunt (B), Penetrating (P), and Special (Sp).

All damage has a Form and a Type. *Therefore a 10th level Energy Blast which is affected by armour or the character's TGH attribute and also stuns the target would be defined as inflicting 10d6 B/S damage.*

## Pulling Punches

Attackers can choose a maximum effect for their attack before they make the attack roll. For example, if a character wants to make a lethal attack, but doesn't want to disable the target, he can choose to limit the attack's effect to a maximum type of "Stunning." Characters with the **Full Effect** problem (p. XX) on an attack cannot choose to pull their punch with that attack; they get whatever dice result comes up.

## Saving Throw

Powers that affect other characters allow a saving throw. The type of saving throw (Strength, Health, Reflex, Intellect, Will and Presence) depends on the power. The TN of the saving throw is generally 10 + the power level. So the TN of a Reflex save against a Level 12 Snare is 22 (10 + 12). A successful save means the power has a reduced or no effect against the target. In some cases, the target's saving throw bonus adds to the TN of the ability roll, which may reduce or eliminate the power's effect.

Saving Throw Target number = 10 + the power's level (unless stated otherwise).

Personal powers (powers that work only on the user) do not require or allow saving throws unless the character is using the Range extra that allows a personal power to affect another character. Willing characters can choose to forgo their saving throw and allow the power to take effect.

## End of the Preview

Please download the PowASsemble document from the same place you grabbed this document. It should provide you the basis for some Superheroic Action!

# Heroic Intentions

There's much more to being a super-hero than simply hunting villains, punching them out, and making sure that your costume is washed for the next day's adventure. Some of these important secondary concerns are represented by the Derived **Social Attribute**. Simply put, the social attribute describe how well-known your character is and how well thought-of he is by the legal authorities.

## Recognition Checks

Each time your character publicly engages in an event that would be considered noteworthy for his current level of fame and prowess (GM's discretion), he is allotted a Recognition Check.

At the end of each adventure (or game session, as appropriate), the GM should roll each Recognition Check. A successful Recognition Check means that the character gains 1 point of SOC.

The Recognition Check formula is: **Character's Current SOC + 3d6 + Modifiers.**

The target TN is equivalent to a social DEF attribute, i.e the character's SOC + 10. This TN can be modified by Action Points or situational modifiers as decided by the GM. For attributes higher than Celebrity status, the situational modifier comes into play. Character's will have to do something major to get such a wide public recognition.

A character may attempt to suppress any Recognition Check— that is, downplay his own celebrity and dissuade the media from paying attention to him, but this is an imperfect process. Super-heroes often gather fame quite *against* their will. To suppress a Recognition check, do not add the character's Charisma modifier to the check total. Instead, *subtract* his Intellect attribute from the check total. A failed disguise skill roll can be further complicated by a recognition check when the cover is blown.

## Recognition and Multiple Identities

A character's civilian and adventuring identities have separate social ratings. A character that maintains *additional* secret identities will have a separate SOC attributes for each one, beginning at 0.

## Losing Recognition

The only way a character can really lose fame is by doing nothing and accomplishing nothing for a long period of time, or by concealing his actions from the eyes of the media. SOC points should only be deducted from a character at the GM's discretion. For example, a character who took a week-long vacation from his super-heroic identity would experience no loss of hard-earned fame, but a character that took a two-year hiatus (in game time) from heroic adventuring to attend to private matters might find his fame and recognition significantly (though certainly not totally) diminished.

## Recognition and Fame

The GM may use a character's Social rating to calculate a rough chance that anyone, anywhere will recognize the character on sight, at TN 21 minus each point of SOC. For example, a costumed adventurer with a Social attribute score of 10 would have a TN 11 chance to be recognized by Solomon Islanders, Greek fishermen, Swiss lawyers, Canadian lumberjacks, and American suburbanites alike. The GM may see fit to add a bonus in the character's native city or area.

## Benefits of Recognition

The more famous a character is, the more likely it is that he will be considered "bankable"— that is, a worthy spokesman for merchandise, companies, and causes. Lucrative deals can be struck by super-heroic adventurers in exchange for product and service endorsements, not unlike those done by sports stars.

Famous characters may also find it lucrative to license their likeness rights for every sort of merchandise, ranging from action figures and clothing to Saturday-morning cartoon serials.

## Character Recognition and Status

Social Score	Character Status
0	Absolute nobody.
1	Walking footnote
2	Urban legend
3	Neighborhood phenomenon
4	Citywide rumor
5	Local news fixture
6	Citywide celebrity
7	Regional celebrity
8	Statewide celebrity
9	National footnote
10	National figure of note
11	National celebrity
12	National media fixation
13	Superstar

Social Score	Character Status
14	Mega star
15-16	International sensation
17-18	Global phenomenon
19-20	Singular wonder of the age

### Drawbacks of Recognition

The trouble with fame is that it often feeds upon itself. Media outlets, including the dreaded “Superazzi” tabloid reporters who make their living covering and sensationalizing the exploits of costumed adventurers, will become more and more interested in a character as his Recognition rating increases. It can be difficult for a character to operate safely or secretly if the merest rumor of his presence in an area is enough to send a dozen camera crews screeching off in hot pursuit of a story.

### Gaining or Losing Reputation

A character’s Social score stands a chance of fluctuating every time the character does something good or bad and anyone finds out about it. If a character can successfully conceal criminal deeds, they won’t negatively affect his Social attribute. Likewise, if he performs an act of great selflessness and heroism and nobody is around to witness it and pass the story on, his SOC score probably won’t go up. *C’est la vie.*

SOC points should be granted or removed by the GM, using the rough rule of thumb that it is always easier to make a bad impression than it is to inspire trust and confidence in others. Positive SOC must be well and truly earned, while negative SOC attributes can be acquired with minimal effort. Remember that Reputation also covers accidents caused by negligence or lack of action on a character’s part!

### Positive Reputation Actions

- Saving lives, rescuing innocents, and displaying public concern for the welfare of witnesses to super-battles and other dangerous incidents;
- Handing captured criminals over to lawful authorities for trial and punishment;
- Cooperating with law enforcement and public safety officials, as best possible;

### Negative Reputation Actions

- Putting a criminal suspect in the hospital with cruel and unusual injuries, publicly torturing or tormenting captured suspects;
- Publicly engaging in a misdemeanor or felony, display reckless behavior during public action against criminals;
- Murdering someone, destroying or severely damaging a major landmark or public institution, disperse or terrorize a large group of people;
- Displaying an avid public greed for fame, money, and other dividends of the super-heroic lifestyle

### Reputation Plateaus

GMs should note that most characters are going to end up at a Reputation “plateau” that fits their nature and preferred styles of action. Only a rare few super-heroes are ever going to be responsible enough to rise above a Reputation rating of 8 or 9, and many good-hearted costumed adventurers are barely going to scrape through their careers with a 5 or 6. A particularly sinister or vengeful super-hero might forever hover in the neighborhood of 0-3. On the other hand, a super criminal that scrupulously avoids murder, mass mayhem, and unnecessary injuries will never really sink below a -10, even if he is wanted on a thousand and one separate felony charges. A negative attributes here is not a death knell for the character, but it does signal the social death of his or her reputation.

### Character Reputation

SOC Attribute	Status and Modifier
-18+	Worldwide Menace (+5)
-16-17	Arch-Villain (+4)
-14-15	Super-Villain (+3)
-12-13	Plague Upon Society (+2)
-11	Major Criminal (+1)
-10	Shameful Villain
-9	Villain
-8	Public Menace
-7	Felon
-6	Crook
-5	Hoodlum or Vandal
-4	Wretch
-3	Miscreant

SOC Attribute	Status and Modifier
-2	Public Nuisance
-1	Troublemaker
0	Disreputable
1	Enigma
2	Untrustworthy
3	Suspicious Meddler
4	Simple Vigilante
5	Tolerable Interloper
6	Well-Intentioned
7	Justifiable or Commendable
8	Trustworthy
9	Genuinely Heroic
10	Regional Hero
11	National Hero (+1)
12-13	International Hero (+2)
14-15	True Super-Hero (+3)
16-17	Paragon of Heroic Virtue (+4)
18+	Living Legend (+5)

### Reputation Modifiers

A sufficiently high (or low) Social score may grant a character a numerical modifier to some Presence-based skill checks in certain circumstances. A character with a sufficiently high Social score may apply his Reputation modifier to Command and Diplomacy checks. A character with a sufficiently low SOC attribute may apply his Reputation modifier to Communication and Professional skill rolls.

### Game Master Option

When a Game Master feels that his or her campaign does not need to keep track of their hero's social rating within their universe then this attributes can be largely ignored. Some character traits do use these attributes but an easy substitute would be a skill that would be affected by the Benefit or Complication. Otherwise Game Masters can have a lot of fun with the campaign interaction that these attributes give.

## Action Points

Action Points (abbreviated as AP) allow player characters (and important NPCs) to receive bonuses when performing dramatic or heroic actions (see *Using Skills*). By using Action Points, players can have their characters pull off amazing stunts and heroic feats, such as jumping off of a cliff, avoiding an explosion, or even dodging a gunshot or arrow! Rather than relying on a random chance as dictated by the dice, players can create their character's successes when they need them most!

A character begins each game session with one free Action Point. A character can gain more Action Points by attempting dramatic and heroic actions. Players can be awarded additional Action Points by the GM at any time during a game. Generally, Action Points are awarded for attempting dramatic and heroic actions. GMs can also award additional Action Points for role-playing and anything else they deem appropriate. Action Points are not the only award that players will receive. There are improvements to be purchased and disadvantages to be eliminated using Experience Points as well (see *Experience Points*).

A character can save Action Points from one game session to the next, but never more than 3. If a character has more than 3 Action Points but does not use them by the end of the game session, they are lost. GMs should not be stingy with Action Points, and players should use them as often as possible, especially in cinematic style games.

## When To Use Action Points

### Dramatic or Heroic Actions

Action Points may be used for any dramatic or heroic action with GM's permission.

A dramatic action is any action or moment in the game that is especially exciting, tense, suspenseful, or is very important to the story. Think of it in terms of an action movie; if something happens that scares you, has you on the edge of your seat, makes you want to jump up and yell, "Yes!" or clap really loud, it was probably a dramatic moment in the movie.

Examples of dramatic moments include jumping from a high-rise office window to a helicopter hovering outside, an escaped prisoner of war narrowly avoiding enemy soldiers who are searching for him, a showdown or duel between two long-time rivals or arch enemies, and disarming a nuclear warhead with seconds to spare.

## After the Dice Are Rolled

Action Points may be used after the dice have been rolled but must be used before the GM describes the outcome of the events for that turn. A player may not use more Action Points in a single game session than the character has, and no more than three Action Points can be used with any single action or skill roll.

## What Action Points Do

Action Points may be used in one of several ways to enhance a character's performance in a game.

A player may use up to three available Action Points in any single turn. These may be split up and used on different actions, events or dice rolls, as long as they all take place in the same turn.

### Boost a Skill Roll

Each Action Point used to boost a skill roll adds a bonus of +5 to the roll.

*Nicholas is playing in a gritty superhero game. His character, Dark Justice, is facing two gunmen in a shopping mall. One of the gunmen turns and fires his gun into the crowd. Nicholas wants to protect the innocent bystanders, so he tells the GM "Dark Justice is going to throw his mini-shield to hit the gun and knock it upward, so that no one gets hit." The GM considers the action and decides that Nicholas needs to make an Extreme Throwing skill roll (TN 27). Dark Justice has REF of 7 and his Throwing skill is +5, for a total of 12. Nicholas rolls 3d6 and gets 14, for a total of 26. Ordinarily Nicholas would have failed the roll. But Nicholas decides to spend an Action Point. The GM allows it because it is a dramatic moment in the adventure. Nicholas spends one AP and adds 5 to his roll, making his new total 31, turning the failed attempt into a successful one. Dark Justice thwarts the evil gunman's plans and saves the innocents! Nicholas then marks off one Action Point from his character sheet, and the game continues.*

Should the GM deem it appropriate, using Action Points to fulfil a heroic or important plot or goal may be reason enough to award an additional Action Point!

### Boost an Attribute

Each Action Point spent will temporarily increase a primary attribute by 1, or a derived attribute by 5.

Attributes increased in this way do not also increase derived attributes, although this may be used to increase the attribute for use with a skill roll.

This increase lasts for the duration of one "event" within the game, not merely one skill roll.

*Ryan is playing Louisiana Smith, an archaeologist and explorer, in a pulp adventure game. In the game, Louisiana has just recovered a stolen artefact from a Nazi camp. As he sneaks through the camp, he comes face to face with a big, tough Nazi soldier who is guarding a Flying Wing aeroplane that Louisiana needs to escape. Louisiana's STR is only 3, he will do only 1d6+2 damage when Louisiana punches his opponent. Ryan knows he'll have to do more, because this guard is very big. Ryan spends one Action Point to increase his STR to 4 for one turn. Now, if Louisiana connects with a punch he will do 2d6 damage! His increased STR does not increase any of his Derived Attributes, such as his TGH, however. The GM determines that a fist fight is an "event" and allows Louisiana to keep his STR at 4 for the duration of the fight. Whether Louisiana wins or loses, however, once the fight is over his STR will return to 3.*

### Cancel Fatigue

Any time characters would suffer fatigue (including the effects of the Fatigue power and the use of extra effort), characters can spend an Action Point and reduce the amount of fatigue by one level (so no fatigue is suffered from a fatigued result, are fatigued by an exhausted result, etc.).

### Escape Death

Spending an Action Point automatically stabilizes a dying character (the character or someone they are assisting), although this doesn't protect the stabilized character from further damage.

### Increase Damage

Action Points may be spent to increase the damage inflicted by one of the character's own attacks. It may not be used to increase the damage caused by another player's character.

Each Action Point spent in this manner increases the damage done by a single attack or event by 5 points. Damage may be increased up to 2x the maximum damage normally possible. This can simulate a "stroke of luck" in which a the opponent moves into a punch, a lucky blow, a miracle, or any other explanation agreed upon by the player and the GM.

*Louisiana needs to finish the guard off, and Ryan tries for one mighty punch to the guard's head in an attempt to knock him out. Ryan makes his attack roll—success! Normally Louisiana would do 2d6 damage with a punch (from the previous example), but Ryan spends an Action Point to boost the damage.. Wham! The guard is hit, and Ryan rolls his damage (2d6) and gets 6. Then he adds 5 points for the Action Point for a total of 11, knocking the guard out.*

### Inspiration

Once per game session, players can spend an Action Point to get a sudden inspiration in the form of a hint, clue, or bit of help from the GM. It might be a way out of the villain's fiendish death-trap, a vital clue for solving a mystery, or an idea about the villain's weakness. It's up to the GM exactly how much help the players get from inspiration.

Gamemasters may even wish to expand the "inspiration" facet of hero points to allow players greater control over the environment of the game, effectively allowing them to "edit" a scene to grant their heroes an advantage. For example, a hero is fighting a villain with plant-based powers in a scientific lab. The player deduces the villain may be vulnerable to defoliants, so she asks the GM if there are any chemicals in the lab she can throw together to create a defoliant. The Gamemaster requires to player to spend an Action Point and says the right chemicals are close at hand.

How much players are allowed to "edit" circumstances is up to the individual Gamemaster, but generally hero points should not be allowed to change any event that has already occurred or any detail already explained in-game. For example, players cannot "edit" away damage or the effects of powers (action points already allow this to a limited degree). The GM may also veto uses of editing that ruin the adventure or make things too easy on the players. Inspiration is intended to give the players more input into the story and allow their heroes chances to succeed, but it shouldn't be used as a replacement for planning and cleverness, just a way to enhance them.

## Instant Counter

Players can spend an Action Point to attempt to counter a power used against characters as a reaction.

## Reduce Damage

Each Action Point spent reduces the damage from a single attack or event by 5 points. If the damage is effectively reduced to less than 0, treat it as 0 points of damage. This can simulate a "stroke of luck" in which an attack completely misses the character, a glancing blow, a miracle, or any other explanation agreed upon by the player and the GM.

*During the fight with the Nazi soldier, Louisiana gets hit with a haymaker punch for 17 points of damage! Louisiana's TGH is only 3, so he will suffer 14 points of damage from the punch. Because this exceeds half his LIF, Louisiana will be knocked unconscious! Ryan decides to spend his last remaining Action Point to reduce the damage of the attack. By spending an Action Point, the damage is reduced from 14 to 9 points. Louisiana reels from the blow but he is still up and fighting!*

## Recover

Players can spend an Action Point to recover faster. an Action Point allows characters to immediately shake off a stunned or fatigued condition.

If characters are exhausted, spending an Action Point causes them to become fatigued. If they have suffered damage, an Action Point allows characters an immediate recovery check as a full-turn action. It takes two rounds for a staggered hero to make a recovery check, since characters can only take a standard or move action each turn while staggered. This check is made normally, the Action Point just allows the player to make it in addition to the normal recovery checks. If the recovery check is successful, it turns out the damage wasn't as serious as it first appeared, or the hero is able to shake it off.

While disabled, you can spend an Action Point to take a strenuous action for one turn without your condition worsening to dying. If you spend an Action Point on a normal recovery check for bruised or injured conditions, a successful check eliminates all of that condition, rather than just one. The Action Point does not improve the recovery check, only its effect.

## Gaining Action Points

Characters can gain Action Points during the game. When a character fulfils one of the following criteria, the GM should award an Action Point to the character. GMs should not be stingy with Action Points, and players should use them as often as possible, especially in cinematic style games. For guidelines on how many Action Points to award in a game session, see the next section.

## When to Award an Action Point

### Dramatic or Heroic Actions

The GM should award one Action Point for any particularly dramatic and heroic action attempted by the characters during the game, whether it is successful or not (see *Dramatic or Heroic Actions*).

### Meet a Goal

If a character manages to fulfil the "in-game goal" for his character, he should receive an Action Point. The fulfilment of the goal must be in a way that logically fits into the current adventure or story.

Louisiana Smith narrowly defeats the Nazi guard in a tough fist fight and climbs aboard the Flying Wing to escape with the artefact he came for. The GM decides that defeating the guard so that Louisiana could use the plane to escape with the artefact is a worthy goal and awards an Action Point to Ryan. Ryan notes the new Action Point on his character sheet.

### Memorable Game Moments

GMs can award Action Points to players for especially good role-playing. Any time a player performs a particularly memorable "moment" within the game, portraying his or her character, or does something to improve or propel the story or that entertains the rest of the group in a significant way (GM's discretion), that player deserves an Action Point.

*The young Samurai Tateno towered over Hideo, his older, more experienced foe. The older man looked up from his broken sword with wet eyes. "You have shamed me with your skills." "No," replied Tateno, "you have shamed yourself with your lack of them." Turning his back, Tateno walks quietly away, refusing to give Hideo even the death of a Warrior.*

### Give the GM a Plot Hook

If a player manages to role-play some aspect of his or her character in a way that allows the GM to work it into the main plot of the adventure—especially if it allows the GM to make a "complication" for the PCs out of it—the player should receive an Action Point. Many Disadvantages provide great plot hooks for the GM, such as Dependent, Enemy and Secret.

Nicholas's character, Dark Justice, hands over two recently captured gunmen to the police. As the last assailant is placed in a squad car, Nicholas tells the GM that Dark Justice uses his communicator to call his fiancé Nancy's apartment.

“He’s already running late for their dinner date,” Nicholas says, “but he knows she will understand.” The GM decides that this is a great opportunity to add a new twist to the story! The GM tells Nicholas that the voice on the other end of the phone is definitely not Nancy. “Good evening,” came the voice of Cyrus, Dark Justice’s arch enemy. “I am afraid the young lady has made other plans...”

## Other Circumstances

GMs can create additional circumstances under which a character gains an Action Point, and some published products will include additional guidelines for awarding Action Points, based on the setting or genre. For example, in a pulp adventure game, characters might gain an Action Point for incorporating their character’s “tag line” into normal dialogue during the course of the adventure, for role-playing a scene exceptionally well and in-character, or any situation in the game that the GM feels is deserving of an Action Point award to one or more of the players.

## How Many AP to Award

The GM should carefully consider how many Action Points to give out to any single character in a game session, however. Because characters cannot save more than three Action Points from one game session to the next, players will likely spend them freely. If a GM awards 10 Action Points to a character in a single game session, that’s effectively the same as giving the player five “automatic successes” to use during the adventure. This is perfectly acceptable, if this is what the GM wants, but it also diminishes the usefulness of points spent on each character’s attributes and skills, and some players may feel cheated.

As a guideline, GMs should award an average of one Action Point to each character in *Realistic* level games, 2 Action Points to each character in *Cinematic* level games, and 3 or more Action Points to each character in *Extreme* level games.

*Mike is running an animé-style, Extreme level game. Because the game is based on animé, the action is at times over the top, so Mike wants his players to use Action Points frequently in his game. Mike decides that he will award an average of 5 Action Points to each player in his game each game session.*

A player can save Action Points from one game to the next, but never more than 3. If a character has more than 3 AP but doesn’t use them during the game, the extra points are lost.

## NPC Action Points

Just as player characters have Action Points to allow them to overcome problems and push themselves further, Gamemaster have a pool of NPC Action Points that GMs can use to give the villains an edge and make things harder for the heroes. The number of NPC Action Points GMs get depends on the heroes in the game. Take the total amount of Action Points available to the heroes and divide the total by two and round down for the total NPC Action Points for that adventure. GMs can spend these NPC Action Points for any NPC (not just villains), but they’re primarily used to give villains similar advantages to heroes.

GMs can spend NPC Action Points on any of the following:

- **Re-roll a die roll:** One NPC Action Point allows GMs to re-roll any die roll the GMs make and take the better of the two rolls. If both rolls are below 10, then treat the GM’s roll as a 10. GMs can only spend one NPC Action Point per roll.

- **Improve NPC Defence:** Once per round GMs can spend a NPC Action Point to increase a character’s Defence by 5. This bonus lasts until the beginning of that character’s next action.

- **Recover from Stun:** GMs can spend a NPC Action Point to allow a character to immediately shake off a stunned condition.

- **Ignore fatigue:** Any time a character would be fatigued by taking an action, including extra effort (above), GMs can spend a NPC Action Point to allow the character to ignore the fatigue result.

- **Overcome injury:** If a character is disabled (see Damage and Injury, p. XX), GMs can spend a NPC Action Point to allow them to take a strenuous action for one round without their condition worsening to dying. Characters can still only take a half round action each round and their condition doesn’t improve, they’re just able to overcome the pain and injury for a few moments.

- **Escape death:** If a character is dying, GMs can spend a NPC Action Point to automatically stabilize and prevent them from dying, although this doesn’t protect the character from any further damage. GMs can also spend a NPC Action Point to allow a villain to escape from otherwise certain death, such as a spectacular explosion that destroys his headquarters. Unlike Hero Points, NPC Action Points do not allow a villain to eliminate stun damage or to recover faster from being knocked out or disabled. They also don’t provide inspiration, since that has to come from the Gamemaster anyway.

## Experience Points

As characters finish each adventure and (presumably) accomplish the goal set forth for them, whether it be to rescue a falsely imprisoned person, capturing or eliminating an enemy unit, saving someone’s life or safeguarding a secret message to the King, the characters should earn Experience Points (EP).

### Awarding Experience Points

Character improvement is the primary method for the GM to express his opinion on how the players are doing. There are many ways to quantify success; goals achieved, excellent role and character playing, even contributions to the background of the world. The number of experience points to award to characters will vary from adventure to adventure. Some GMs will also award experience for mapping or other record-keeping duties, character sketches, or other contributions to the game as a whole. Here are some guidelines for GMs to help determine how much experience points to award at the conclusion of an adventure.

### Spending Experience Points



Some players will want to scrimp and save for a big character improvement. Others will spend a point here and there just to spend them and improve some small bit. Either of these extremes is probably the wrong approach. In the best games, players should mix long-term and short-term goals, putting points into less expensive abilities while saving others for larger steps.

Characters can increase existing skills, increase existing abilities, and under certain conditions develop completely new skills and abilities. Which of these a player decides to pursue also determines how you proceed.

Most games will have a starting skill maximum. For this example we will use +5. No character can buy a skill higher than +5 at the start of play. This will also be the training skill maximum. That is, no character will be able to take advantage of instructor led training past +5. After that all progression and improvement will only be through experience within the course of the game.

GMs may also wish to limit the way experience is spent to abilities that are *used* or specifically studied in the game. A rule of thumb would be that if the character did not use a skill or ability that session, then that skill or ability cannot be improved. Some GMs will find this too restrictive.

## Experience Point Awards

Description	EP
Base experience point award for an adventure	1
The adventure was...	
...Short (one game session)	+0
...Long (two game sessions)	+1
...Very long (three or more sessions)	+2
The adventure ended...	
...successfully	+1
...unsuccessfully, but with a chance for the PCs to fix things next session	+0
...unsuccessfully with no chance to fix things	-1
The character performed a dramatic or heroic action or speech that...	
...Added enjoyment to the game*	+1
...Accomplished a team goal*	+1
...Presented serious risk to the character*	+1
The player...	
...Contributed a major plot element	+2
...Contributed a minor plot element	+1
...Developed a character background	+1

## Character Improvement Costs

Attributes	EP Cost
Increase Attribute score	5x new attribute score

Traits	EP Cost
Buy new Benefit	Listed cost of Trait
Increase level of Benefit	Difference in cost of current and new level (and GM's permission)
Buy off existing Complication	Value of Disadvantage (and GM's permission)
Take new Complication	No point benefit

Skills	EP Cost
Skill Group levels	New level ×5 in EP
Skill levels	New level ×1 in EP
Speciality levels	New level × .5 in EP

Powers	EP Cost
Power Group levels	New level ×20 in EP

Powers	EP Cost
Power levels	Listed cost of Level in EP
Power trait	Number of levels of the power ×2 in EP
Power tweak	Number of levels of the power ×1 in EP
Power problem	No point benefit

Action Points	EP Cost
Buy one Action Point	10 (and GM's permission)
"Cash in" Action Point	-1 (character gets 1 EP)

## Rules of Play

The following section gives the players and the game master the method of resolving combat, taking damage, and the campaign environment's impact on the game play.

### Taking Actions

Throughout the game each player declares to the GM, one at a time, the actions his or her character is performing each turn.

A turn varies in length. There is no set amount of time for a turn; a turn can be a month, a day, an hour or a few seconds. The GM during play determines the length of a turn, except during combat (see *Combat*).

#### What Can I Do?

The GM can allow characters to perform any action that the GM thinks is reasonable, as long as the story continues.

#### What Is An Action?

An action can be something as simple as opening a door, talking to another character, or even waiting for something to happen. Actions can also be more complex, such as firing a gun at something (or someone), trying to solve a puzzle or riddle, or performing calculations on a computer.

If a character performs or attempts a complex action, the player may be required to make a skill roll. The GM's job is to decide when a player needs to make a skill roll for something the character is trying to do (see *Using Skills*).

#### Limitations on Taking Actions

##### One Action Per Turn

Characters may perform one action per turn without penalty while walking or standing still. Characters who are running may perform one other action in the same turn at a -3 penalty. Characters who are sprinting may perform one other action at -6. Similarly the super power section has speed statistics which determine what actions the character can perform in a turn.

*Jim is playing Private Stewart, a soldier in a World War II action game. Private Stewart is walking across a field when he comes under enemy fire. For his character's next action, Jim tells the GM that Private Stewart is going to run for cover while firing a few shots in the direction of the enemy. Because Private Stewart is running, but not sprinting, Private Stewart can perform both actions in the same turn, but has a -3 penalty on his shot.*

*Private Stewart can't make it to cover in one turn so on the next turn Jim decides to have his character sprint rather than run. Because Private Stewart is sprinting this time, he can perform an action that requires a skill roll in the same turn but at a -6 penalty, so the GM tells Jim that his character can sprint and fire blindly while sprinting (i.e., with no skill roll allowed) or he can sprint and make an attack roll at -6 in the same turn.*

##### No Impossible Actions

A character cannot perform an action that is physically impossible given the circumstances.

A character swimming in a river cannot suddenly "appear" in the middle of a desert. The character could get to the desert eventually, but it's impossible to do so in one turn. Likewise, a sword smith cannot forge a sword in a single turn; it is simply impossible to heat the steel, hammer and shape it, and so on, in a single turn.

Common sense and fair play should be the guides for the GM in deciding whether a task is physically impossible. For instance, in some game settings, the use of magic or high technology will allow characters to do things that would be impossible to do in the real world.

#### Time

Every task requires a certain amount of time to complete, as determined by the GM. If a character takes more or less time than usual to perform a task, he receives a bonus or penalty to the Target Number, respectively.

When determining the bonus or penalty for more or less time taken on a task, refer to the *Time Chart*, below. Simply find the level on the Time Chart that is closest to the amount of time the task normally takes. The GM should determine the average length of time normally required to perform the task, then consult the *Time Chart*. If the time required to perform a task is longer than the closest level on the Time Chart, then use the next greater time increment as the default level.

*Pat's character is picking a lock. The GM feels that picking a lock should take an average person about 20 seconds.*

*“20 seconds” is more than 1 turn but less than the “30 seconds” level, so the base time level for Pat’s character’s lock picking attempt is “30 seconds” for purposes of determining any bonus or penalty for taking extra time or rushing the task.*

### Time Chart

1 turn (3 seconds)  
30 seconds  
5 minutes  
1 hour  
1 day  
1 week  
1 month  
1 quarter (3 mos.)  
1 year  
1 decade  
1 century  
1 millennium

### Taking Extra Time

Characters can take more time than normal to perform a task in order to improve their chance of success. By taking more time than normal, the task becomes easier. For each lower level down the *Time Chart* (i.e., for each larger period of time taken), the skill roll receives a +3 bonus.

*Pat’s character needs to pick a lock that he knows to be very tough. The GM has decided that picking the lock is a Challenging task (TN 18). Since there is no immediate danger and his companions are watching the passageway, Pat decides to take his time and concentrate. The referee decides that If Pat spends 1 hour on the task he will get a +6 bonus to his skill roll because “1 hour” is two steps lower on the Time Chart than 30 seconds. Not wanting to take quite that long Pat decides to take 5 minutes and gets a bonus of +3, making it equivalent to a Tricky task (TN 15).*

### Rushing

Characters can attempt to perform a task more quickly than normal. By taking less time than the “base time” for a task, the task becomes more difficult. For each higher level up the *Time Chart* (i.e., for each smaller period of time taken), the skill roll incurs a -3 penalty.

*Pat’s character picks the lock and makes his way into a stable where he finds a horse. Pat decides his character is going to try to ride the horse out of the city. Unfortunately for Pat the horse is not saddled and his character is not very knowledgeable about horses and riding gear, so the GM tells Pat that he will need to spend 5 minutes and make a Challenging Riding roll (18) using INT in order to properly saddle the horse.*

*The city guards can also be heard nearby. Pat does not want his character to be found and captured, so he decided his character will rush the saddling of the horse, taking only 30 seconds to throw the saddle on and secure it as well as he can before riding off. Pat will suffer a -3 penalty for rushing, making the task a Difficult one (TN 21)!*

### Repeated Attempts

Characters who fail at a skill roll may make another attempt, with conditions.

A character who attempts a task again after failing it once may make a new skill roll, but is at -3 for each successive attempt. This penalty is cumulative and is in addition to any other modifiers for taking extra time or rushing (see *Taking Extra Time*, page 82).

*Pat fails his skill roll to saddle the horse. But he really wants to get the task accomplished and soon, so Pat tells the GM that even though his character failed the first time, he is going to try again. The GM tells Pat that he can try another skill roll but this time at a -3 penalty. Pat decides to go for it, and he chooses to rush yet again. His character spends another 30 seconds on the task, the same as last time. Pat can make another skill roll, but this time with a -3 penalty for a repeated attempt, plus an additional -3 penalty for rushing, making the normally Challenging (TN 18) skill roll equivalent to a Demanding one (TN 24)!*

### Declaring Actions

When declaring their character’s actions, the players can simply describe what their characters say and do (called “narrative style”) or they may talk “in character,” talking the way they think their characters would (called, appropriately, “in character” style). Either way is fine. Most players of role-playing games use a combination of styles.

Here’s an example of narrative style.

Player: *“My character tells the guy he’s starting to annoy my character.”*

Here’s an example of in character style.

Player (in his character’s voice): *“You’re starting to annoy me.”*

Here’s an example of using a combination of the two styles.

Player: *“My character stands up.”* (Then, in his character’s voice) *“You’re starting to annoy me.”*

See? There’s nothing to it.

Players who make especially good tries at role-playing and characterization should receive bonuses of +1 to +3 (added to the character’s dice roll). GMs can also award Action Points to players for especially good play (see *Gaining Action Points*).

## Available Actions

The following is a list of actions available to characters. This list is not exhaustive. There may be moments in your game when the players want to do something that is not specifically covered by the actions presented here. In these cases, GMs are encouraged to make up additional actions for use in their game.

Indeed, if some rule or modifier strikes you as inappropriate or just plain “wrong,” then go ahead and change it for

your game. This game is designed to be fun, so if you feel that any rule is getting in the way of you having fun, toss it out!

## **Defensive Actions**

Defensive actions are those designed to protect a character from injury and harm. If a player has a held action, he may abort the held action in order to declare and use a defensive action (see *Wait*, below).

Characters may "abort" to a defensive action at any time during a turn, even if it means acting before their INI would indicate. If a character is attacked (or if a player otherwise feels her character is in danger), the player may declare that their character is aborting their normal action that turn in order to perform a defensive action. This is particularly useful if a character is ambushed or attacked unexpectedly.

*Pat is playing in a modern military game and his character is getting ready to fire his weapon at a bad guy. Before Pat's turn comes around, however, the GM tells him that a grenade lands at his character's feet! Pat tells the GM that his character aborts his action that turn and instead dives for cover.*

## **Block Melee Attack**

Block can be used to thwart an attack. The character must have something sufficiently durable with which to deflect the incoming attack. A plastic fork, for example, cannot block a sword blow. Edged weapons may not be blocked using the Unarmed Combat (Brawling) skill, though they may be blocked using other styles, such as Karate or Aikido, at the GM's option.

To Block a HTH or melee attack, the character must make a successful skill roll, using his REF + appropriate combat skill +1. If the effect number of the Block roll is equal to or greater than the effect number of the attacker's skill roll, the attack has been blocked and the blocking character gains a +4 to his INI against his attacker on the next turn. This INI bonus does not apply to actions against characters other than the attacker whose attack was blocked.

Characters who are blocking a melee attack receive a bonus of +2 to their DEF against melee attacks, but no bonus against ranged attacks. This bonus lasts until their next action.

## **Countering**

In some circumstances the effects of one power or manoeuvre may *counter* another, negating it. Generally for two powers/manoeuvres to be polar opposites they must have opposing special effects. For example, light and darkness powers can counter each other as can heat and cold, water and fire, and so forth. In some cases, such as with mental powers, powers of the same special effect can also counter each other. The Neutralize power can counter any power of a particular effect or even any power at all! Martial Arts also has a countering system whereby a manoeuvre's special effect may be nullified by the right choice in counter-move.

**How countering works:** To counter a power, characters must have an available action that is compatible with the countering power's speed. Another option is to be on the defensive or defer their character's action. Powers usable as a reaction do not require an available action; they can be used to counter at any time. Powers requiring a full action or longer cannot counter another power in combat (although they may counter ongoing effects, see the following section). If an opponent attempts to use a power able to be countered, use the countering power as the available action. Make an opposing power checks (3d6 + power level). If won, powers cancel each other and there is no effect from either. If the opposing character wins, the attempt at countering is unsuccessful. The opposing power works normally. The countering character's DEF is at -3 while performing this action.

Martial Arts and Hand to Hand combat does not have to be a system of attack/defence. A spinning head kick (Unarmed Strike) could be countered with a sweep attack (

**Example:** *Magmatron, the human volcano, is fighting Mudslinger. The villain hurls a Projected Blast of soil and water in an effort to hurt and blind Magmatron. Having held his action, Magmatron's player wants to counter Mudslinger's Projected Damage with his Eco Control – Magma power. The GM agrees the two powers should be able to counter each other with Magmatron being able to superheat soil and turn it into a substance he can control, so he asks Magmatron's player to make a Ability Roll, while he makes a contested ability roll for Mudslinger. Magmatron's player rolls a result of 26 while the GM rolls a result of 19 for Mudslinger. Siren successfully counters the Earth Blast, which super heats as it approaches Magmatron and slowly orbits around his head like a halo ready to be used as fodder for his Eco-Control..*

**Countering ongoing effects:** Power can also be used to counter the ongoing or lasting effect of a power, or the lingering results of an instant power (like flames ignited by a fiery Projected Damage). This requires a normal use of the countering power and an opposed ability roll, as above. If successful, counter the effect (although the opposing character can attempt to re-establish normally). The countering character's DEF is at -1 while performing this action.

**Example:** *Mechamind has placed Uberdroid under his Mechanical Control. Technobabe has the power to break such bonds (she also has a power group allowing the control of machines). She 'silicon ghosts' into her teammate's systems and makes a power check (3d6 + her Mind Control level). The GM makes an opposing ability roll of 3d6 + Mechamind's Mind Control level. If Technobabe wins, Uberdroid is free of Mechamind's control. If she fails, the team will have to come up with another plan to neutralize their super-strong android team-mate without damaging him.*

**Instant countering:** An available tactic for the player is the option of using an Action Point to counter another power as a reaction, without the need to ready an action to do so. The countering character's DEF is at -5 while performing this action.

**Example:** *The Flameron and his sidekick Sparky face off against Icepoint, who hurls a powerful ice spike at them. Flameron's player chooses to spend an action point, allowing Flameron a shot at countering the incoming attack with his own Alternate Form(flame) before it hits. He and Icepoint make ability rolls (3d6 + level). Flameron manages to win and block the iceman's projected damage... this time.*

## Dodge

With this action, the character can avoid damage from a blow or other attack. The character must have an action available to use in the turn he is being attacked. No skill roll is required.

When a character is dodging, the character receives a bonus of +3 to his DEF. This bonus lasts until his next action. The character may also move up to one half his MOV in meters.

The player must declare he is dodging before the attack roll is made against the character. A character may use a held action to perform a Dodge.

## Roll With the Blow

With this action, a character that has been struck by a melee or hand-to-hand attack can Roll With the Blow to avoid some of the damage. The character must have an action available to use in the same turn he was attacked. The character makes a skill roll using REF + (Unarmed Combat or Acrobatics skill). If the effect number for the skill roll exceeds the attack roll, the character suffers only half of the damage rolled, before subtracting his TGH.

Characters who are rolling with the blow receive a bonus of +2 to their DEF. This bonus lasts until their next action.

A player may declare this action after the attack roll is made but it must be declared before the damage is rolled for the attack. A character may abort a held action to roll with the blow.

## Movement Actions

### Balance

Situations may require that characters maintain their balance during their movement action. Maintaining balance may mean the character avoids a nasty fall, however they have essentially lost any initiative for that turn while they centre themselves. Players may opt to dive, roll or somersault instead of maintaining their balance. The re-balancing character's DEF has a penalty of -2 during the turn and automatically loses initiative.

### Cautious Speed or Crawl

With this action, the character may crawl along the ground or any surface he could normally walk on. The character moves a distance of up to one half his MOV (rounding up) in meters each turn spent crawling. Cautiously moving characters are walking upright (although may be hunched over) and able to use full action traits or powers without penalty however their REF is not added to their Defensive Target Number. Crawling characters are treated as if they are prone (+1 penalty to TN) and do not add their REF to their DEF while crawling.

### Climb

With this action, the character may climb a distance of up to one half his MOV (rounding up) in meters each turn. Some surfaces may require the character to make a Climbing roll, at the GM's discretion (see *Climbing*).

### Dive

With this action, the character can attempt to leap out of harm's way, avoiding the effects of an explosion, a hail of gunfire, or simply dive across some distance, such as an open pit. The player declares the spot (i.e., the target hex) where he wants to land and makes a STR + Leaping roll. The base TN for the roll is equal to 10, plus 2 for every meter of distance.

If the roll is successful, the character clears the distance and lands safely. If diving to avoid an area attack, a successful roll means the character avoids the attack altogether. A failed roll means the character was caught in the area of effect in mid leap, suffering normal damage or effect of the attack.

A character may dive up to one half his STR score in meters. Characters receive a bonus of +3 to their DEF while diving. This bonus lasts until their next action.

### Roll

With this action, the character may roll over an object, along the ground, or on any surface he could normally walk on. The character moves a distance up to ½ his MOV in meters each turn. Difficult obstacles may require a REF attribute roll or Acrobatics roll to successfully pass over, at the GM's discretion.

Characters receive a bonus of +2 to their DEF while rolling. This bonus lasts until their next action.

### Run

With this action, the character can jog or run across the ground or any surface he could normally walk on. The character moves a distance up to 2x his MOV in meters and may take one additional non-movement action at -3.

Characters receive a bonus to their DEF based on their total MOV velocity (see *Combat Modifiers*).

### Sprint

With this action, the character can sprint across the ground or any surface he could normally walk on. The character moves a distance up to 3x his MOV in meters and may perform one other non-Movement action at -6.

Characters do not receive their REF bonus to their DEF while sprinting. This restriction lasts until their next action. Sprinting characters still receive a bonus to their DEF based on their total MOV velocity, however (see *Combat Modifiers*).

### Somersault/Flip

With the necessary (and successful) acrobatics or martial arts skill, the character may make their movement as an acrobatic style. The character can choose which direction they are facing at the end of the movement and any effect numbers may be helpful in adding to melee damage if this acrobatic movement was part of a combat move.

### Walk

With this action, the character can walk across the ground or any surface he could normally walk on. The character moves a distance up to his MOV in meters and may take one additional action at no penalty.

Walking characters may receive a bonus to their DEF based on their speed (see *Combat Modifiers*).

## **Full and Half Actions**

Most traits, skills and powers require that a half action be spent in successfully completing that action.

### **Meta-Abilities**

Powers that are described as a "Half Action" speed can be used while running and sprinting. However the target numbers are affected as per the Run and Sprint descriptions in the Movement Action section (-3 and -6 respectively). If a power can be maintained through concentration, there is a penalty if the character is running or sprinting, not on the defensive and not engaging in further actions.

### **More than one action**

Similarly to the rule of running and performing a task, Half Action powers enable the character to attempt another half action skill, manoeuvre or power but with a -3 penalty to be successful. Whether this -3 manifests as a penalty to the character's roll against a TN or to the damage inflicted is up to the Game Master to decide. If the character was running that turn, the second half-action would be at a -6 modifier (-3 for running and an additional -3 for the extra half action).

*For example Trademark is a mimic who also has the Power Scan ability. Power scan is a half-action ability so when it came to a stand-off with a kidnapper claiming to have super powers of his own. Trademark has to think quickly. He scans the kidnapper using a half action and snaps a shot with his pistol past the hostage and at the kidnapper's head. Along with the modifiers to snapping a shot, there is a -3 half action penalty as this is the second action this turn for Trademark.*

### **Full Actions**

Some powers, skills and actions are simply not able to be achieved

## **Offensive Actions**

### **Aim**

When firing a missile weapon (such as a bow, crossbow, firearm, and so on) at more than short range, the skill roll becomes more difficult. By taking time to aim, characters can offset some or all of these range penalties. For each full turn spent aiming a weapon (and nothing else), the character receives a bonus of +2 to his skill roll. The maximum bonus is +6.

While aiming, the character must remain focused and his DEF for any attack rolls against him do not receive the benefit of his REF. Any attempt to react to an attack (i.e., to gain the REF bonus to his DEF) or to perform any other action ruins his aim and any bonus gained for it. The character must spend another turn aiming for any benefit, essentially starting from scratch.

*Sean is playing in a Marine sniper in a modern covert ops game, Sergeant Mace Silverhawk. Mace's target is 400 meters away, imposing a -12 penalty, requiring Sean to make a Rifles skill roll with an effective TN of 22. Sean decides that Mace, who is hidden, is going to spend two turns aiming, reducing the effective TN from 22 to 18. Mace squeezes the trigger and Sean rolls the dice...*

### **Bind Weapon**

With this action, the character uses a melee weapon to bind or pin an opponent's weapon. With a successful combat skill roll at -1 (using Unarmed Combat or applicable weapon skill), the opponent's weapons are rendered immobile (e.g., the opponent's weapon arm is held, the two characters' weapons are locked together, etc.) and neither character can strike the other or otherwise use the pinned weapon.

To break out of a bind, a character must win a contested STR roll. Both characters roll STR + applicable combat skill + 3d6. The character with the higher total may either Shove his opponent, breaking the bind, or maintain the bind, at the winner's option.

### **Disarm**

With this action, the character can disarm an opponent, causing him to drop a weapon, such as a sword or gun. The character must make a contested attack roll at -2. If the effect number of the disarm roll exceeds the effect number of the defender's roll, the opponent drops the weapon and is disarmed. Alternatively, the character may attempt a "take-away," with a successful Disarm indicating that the character has taken the opponent's weapon away and now has it in his possession and may be used against the opponent!

Characters attempting a Disarm receive a +1 bonus to their DEF. This bonus lasts until their next action.

### **Drag**

A character that has successfully grabbed an opponent may drag or pull him. The maximum distance in meters that a resisting opponent can be dragged each turn is equal to the dragging character's STR + 1 minus the opponent's STR, up to a maximum distance equal to the dragger's MOV.

*Jim has a STR 5 and Bob has STR 3. Jim has grabbed Bob and tries to forcefully pull him through a doorway, but Bob is resisting. Jim can drag Bob (5 -3 -1 = 1) meter for each action spent dragging him.*

The distance a character can drag an unresisting object (such as an unconscious person) is equal to the dragger's STR +1 minus the STR required to pull the person or object, in meters, up to a maximum distance equal to the dragger's MOV.



*A firefighter is trying to drag an unconscious victim out of a burning building. The victim weighs 100 kilograms and requires a STR of 3 to drag. The firefighter has a MOV of 8 and a STR of 4, so the firefighter can drag the unconscious victim  $(4+1-3) = 2$  meters per turn. The farthest the firefighter could possibly drag an item each turn is 8 meters.*

## Drop

A character that has successfully Grabbed or Restrained an opponent may drop with him to the ground. Both character and opponent will fall to the ground in a pile. Each character suffers 2d6 B/S damage from the fall, and the opponent remains Grabbed or Restrained.

## Grab

With this action, the character uses one or both hands to grab hold of the opponent. The grabbing character specifies an item (such as an article of clothing, a belt, etc.) or one limb that he will grab. The player rolls for the attack, using the Unarmed Combat skill, at -2. In addition, the grabbing character suffers a -2 DEF penalty.

If successful, the opponent is grabbed, and skill rolls for all actions attempted by the grabbed character are at -3. Once a character has an opponent grabbed, he may perform one of the following manoeuvres: Drag, Drop, Restrain or Throw.

To break free from a Grab, the defender must overcome the grabber's strength with his own by making a contested STR + Unarmed Combat skill roll. If the grabber's total is higher than the defender's, then the defender remains grabbed.

Leap

## Leap Attack

Characters can make some of the most spectacular, and lethal, martial arts attacks. Attack damage is increased by two STR points. While airborne, the character's DEF has a -3 penalty. If characters miss with this attack, a Balance Roll (TN 15) must be successful, or be prone. If this balance check succeeds, characters are flat-footed until the start of their next turn leaving them with a -3 penalty to initiative. Leap attacks are actually quite susceptible to counter-attacks should the move be successfully defended against. Using a combination, dive/leap attack turns this manoeuvre into a "Flying Leap Attack" giving the character the distance and damage benefits of such a move (as well as any penalties).

## Restrained

A character that has successfully grabbed an opponent may restrain him by expanding his Grab to restrain two limbs (either both arms or both legs). To successfully restrain an opponent, the character must succeed at a contested REF + Unarmed Combat skill roll against the opponent's REF + Unarmed Combat skill at -2. If the offensive character's total is higher than the defender's, the opponent is fully restrained and cannot use the restrained limbs, and any other actions attempted by the grabbed character are at -5. Once a character has an opponent restrained, he may only perform a Drag, Drop, or Throw, or he may release the opponent.

To break free from being restrained, the defender must overcome the restraining character's strength with his own by making a contested STR + Unarmed Combat skill roll. If the restraining character's total is higher than the defender's, then the defender remains restrained.

## Take-away

This action is similar to the Disarm action, except that with this action, the character attempts to maintain possession of the weapon that he is taking out of his opponent's hands. The character must make a contested attack roll at -3. If the effect number of the disarm roll exceeds the effect number of the defender's roll, the character has taken the opponent's weapon away and now has it in his possession. The weapon may be used against his opponent on the next turn.

Characters attempting a Take-away receive a +1 bonus to their DEF. This bonus lasts until their next action.

## Take-down

This action is an unarmed strike which delivers minimum damage but has the result of depriving the opponent of his/her footing. Characters make a normal unarmed strike. If this attack hits, the result is identical to a Throw attack. Martial Art Take-downs come in many forms such as Leg Hooks, Sweeps and Knee Strikes. Characters attempting a Take-away receive a -1 penalty to their DEF.

## Throw

A character that has successfully Grabbed or Restrained an opponent may throw him to the ground. The opponent falls to the ground and suffers B/S damage equal to the thrower's STR in dice. The opponent may reduce the damage suffered from the Throw by making a successful Acrobatics roll (see *Acrobatics*).

## Unarmed Strike

With this action, the character can strike an opponent with a fist, elbow, kick, etc., to inflict damage. The character makes an attack roll using his REF + Unarmed Combat + 3d6. A successful attack inflicts B/S damage for the attacker's STR, as shown on the STR Table. For determining damage for a kick, treat the attacker's STR as +1.

## Weapon Strike

With this action, the character attacks an opponent or object with a readied weapon. The character makes an attack roll using his REF + (appropriate weapon skill) + 3d6. If successful, the attack inflicts damage as per the weapon listing (see *Weapons*.)

## Special Actions

### Combination

Characters have learned how to use one attack to set up another, firing in combinations for greater effect. When characters are trained in this action, they can combine two Martial Arts Manoeuvres. Characters may then launch these manoeuvres in combination with a lesser penalty. Whenever these manoeuvres are performed in the listed order and direct them at the same target, characters gain +2 to hit and damage bonus on the second attack negating some of the penalties for more than one action in a turn. For example, a character with Boxing takes Combination (Jab/Hook). Any time the character uses a Jab Manoeuvre followed by a Hook manoeuvre, the character gains a +2 to hit and damage with the Hook. Combination attackers suffer an initiative penalty for the next turn of minus (-) 3 per additional combination action taken. There is a maximum combination of three manoeuvres per turn. An example of this is a Combination Leap/Kick/Drop attack where an attacker successfully grabs, then kicks the opponent in the head, following through with a drop move which lands them both on the floor.

## Counterstrike

Characters are trained to use a moment of weakness during an attack to launch a counter-attack. If the defender successfully blocks an attack with a defensive move only, the character may immediately make a counter attack on the opponent with either a melee weapon in hand, or an unarmed attack. The counter-attacker may only make one such attack of opportunity each turn and is -5 DEF. Only characters trained in this action gain any advantages from their combat skill. Unskilled counter-attackers still suffer from the penalties of making more than one action in a turn. Counterstrikers suffer an initiative penalty for the next turn of minus (-) 3 per additional counter action taken.

## Fast Draw

Fast draw is taken in conjunction with a weapon attack, such as drawing and firing a gun or unsheathing and throwing a knife. When performing a fast draw, the character receives a +2 INI bonus for that attack on that turn but the attack roll is at -3. The penalty lasts only for one turn.

## Load Weapon

The character is spending the turn reloading a weapon. Reloading a weapon may take multiple turns to accomplish. As a rule of thumb, sling weapons and bows require 1 turn to reload, crossbows require 2 turns, and black powder weapons require 10 turns. Modern firearms may be reloaded at a rate of 1 loose round or one magazine (or clip or cylinder/speed-loader) per turn.

## Mount/Dismount

The character is able to mount or dismount a steed (usually a horse, but may be any creature used for such a purpose, depending on the campaign) or vehicle. This action does not require a skill roll except in extreme circumstances (e.g., when the beast is running or the vehicle moving).

Characters who are mounting or dismounting do not receive their REF bonus to DEF. This penalty lasts until their next action.

## Wait

With this action, the character is waiting to act. The player may either declare a specific intended action and a circumstance that will trigger the action (e.g., "My character is holding his action and will shoot the first person who walks through that door,") or simply declare that his character is waiting and will act later.

If the player declares a specific condition and a specific action, the character automatically acts first if the condition occurs.

If the player is simply waiting to act later in the turn but with no specific intent (as yet), the character can take an action at any point in the same turn. If a character does not use his held action by the end of the turn, the held action is lost and the character must wait to act until the next turn.

Characters who are waiting are still alert and able to defend themselves, and receives a REF bonus to their DEF, as well as any other applicable DEF modifiers (GM's discretion).

A character may always abort (that is, give up) a held action in order to use a defensive action.

## Roll Modifiers

### Complementary Skills or Powers

Sometimes a character's knowledge of a particular subject can help with a skill roll for another skill. For instance, any character with the Appraisal skill can appraise an antique vase. But a character with specific knowledge of antique vases, knowledge of the culture from which the vase originated, of glazing techniques, or of the family that owned the vase may have particular insights into the history of the vase, thus allowing the character to more accurately determine its value.

When one skill can be used to help with a task that uses a different skill, it is called a Complementary Skill. When a skill is Complementary to another skill, the player receives a bonus to the skill roll equal to one half of the Complementary Skill's score, rounding down.

Super Powers work in a similar fashion with the effects of some powers enhancing the power being used.

*Mike's character has the skills Tactics (Ambushes) +5 and Sub-machineguns +4. He is laying an ambush for some enemy soldiers. The GM tells Mike that he can use his character's Tactics (Ambushes) skill as complementary to his Sub-machineguns skill for the first turn of combat, due to his character's knowledge of launching effective ambushes. Because one half Mike's character's Tactics (Ambushes) score is 2, Mike adds +2 to his Sub-machineguns score, raising it from +4 to +6, for the first turn of combat.*

At the GM's option, the bonus from a complementary skill can remain in effect for the duration of an event or task.

## Off-handed

Characters are either right- or left-hand dominant (player's choice) by default. The character's non-dominant hand is

his “off hand.” Using your off hand incurs a -3 penalty to any skill rolls requiring manual dexterity, such as shooting a gun, throwing, writing, and so on.

Characters with the Ambidexterity trait suffer a reduced penalty or no penalty at all, depending on the level of the trait.

## Tools & Equipment

Some skills do not require equipment for their use. The use of specialized equipment with these skills may provide a +3 bonus to the skill roll, at the GM's discretion.

Some skills, on the other hand, require the character to have access to specific equipment in order to use the skill at all. Examples include a forge, for Blacksmith, or a weapon, for a weapon skill. If the character doesn't have the necessary items he cannot use the skill.

Other skills normally require tools of some kind but can be used with improvised tools. If a skill can be used with improvised tools, at GM's discretion, the character may attempt the task but suffers a -3 penalty.

## Combat

Combat is handled in more detail than most other situations. When any character enters a combat situation—by either attacking another character or non-player character or being attacked—game time “slows down.”

The following rules are provided to allow players and GMs to determine the outcome of combat encounters in their game. And let's face it, there is likely to be a lot of combat—or potential combat—in any cinematic game.

### Combat Turns

Each turn lasts for 3 seconds of “game time.” Each character may perform one action per turn (see *Taking Actions*).

### Initiative

During combat, characters act in order of Initiative (INI). To determine initiative, each player rolls 1d6 and adds the number rolled to his character's INI score. The GM rolls once, for the leader (usually the bad guy with the highest PRE or Persuasion), using the leader's INI +1d6 to determine the Initiative for all of the bad guys. The character with the highest initiative score acts first that turn, the character with the next highest initiative score acts second, and so on.

In the case of ties, the character with the highest Intellect acts first. If both characters have the same Intellect scores, then the actions are simultaneous (see *Initiative*).

Characters with a different length weapon than their opponent may receive a bonus to their INI when at the optimal distance for their weapon (see *Weapon Size*).

### Modifying Target Numbers

In combat, the Target Numbers listed in the *Difficulty and TN Table* do not take into account the opponent's abilities. Rather than using the generic difficulty modifiers in melee combat, the Target Number for attacks against other characters is equal to the target's DEF (see *Defensive Target Number*). The target's base DEF is 10, to which modifiers may be applied.

### DEF Modifiers

There are a number of situations that affect a character's DEF score and, therefore, an attacker's TN. Some examples and suggested DEF modifiers are listed below. All listed modifiers are applied to the target character's DEF score.

Character/target is...	DEF Modifier
aware of attack	+ REF
using a combat skill to defend	+ Skill score
at optimal distance for his weapon and fighting an opponent with a different length weapon	+3
Diving or Dodging	+3
Blocking or Rolling	+2
Balance	-2
Grabbing another character	-2
Armour & Encumbrance	
Unencumbered (< STR kg)	No modifier
Partially encumbered (< Carry wt.)	-1
Greatly encumbered (> Carry wt.)	-3

### Combat Modifiers

A variety of situations can affect a skill roll made to hit a target in combat. For example, skill rolls for ranged attacks are modified by the distance, size, and speed of the target. If a target is close, it will be fairly easy to hit. If a target is far away and moving quickly, it will be much harder to hit.

Some examples and suggested modifiers are listed below. All listed modifiers are applied to the skill roll for the attack.

## Combat Modifiers Table

Target Size	Modifier
Colossal, 64m or more (battle cruiser, football field)	+16
Gargantuan, 32m or more (ship, bridge)	+12
Huge, 16m or more (whale, house)	+6
Very large, 8m or more (city bus, big mecha)	+4
Large, 4m or more (horse, car, tree, sm. mecha)	+2
Medium, 2m (human)	0
Small, 1m or less (dog, barrel)	-2
Very small, 50cm or less (cat, head, limb)	-4
Tiny, 25cm or less (mouse)	-6
Fine, 10cm or less (bullseye, bugs)	-12
Diminutive, 2cm (inch)	-16
Target Visibility	Modifier
Completely obscured/invisible	-5
Mostly obscured (heavy fog, good cover)	-3
Partly obscured (light fog, poor cover)	-1
Target Behind Cover	Modifier
Half body visible	-1
Head and shoulders only visible	-2
Head only visible	-3
Target silhouetted	+2
Elevation	Modifier
Target higher than attacker (uphill, mounted)	+2
Target lower than attacker (downhill, prone)	+1
Aiming	Modifier
Aiming	+2 per turn (+6 max)
Braced (stable base, bipod, pintle mount)	+2
Hip shot	-2
Miscellaneous Conditions	Modifier
Surprise Attack	-5
Improvised weapon (rock, bottle, small girder)	-2
Distance (ranged attacks only; offset by ACC)	Modifier
1 meter	0
2-3 meters	-1
4-5 meters	-2
6-15 meters	-3
16-25 meters	-4
26-35 meters	-5
36-50 meters	-6
51-100 meters	-7
101-150 meters	-8
151-200 meters	-9
201-300 meters	-10
301-400 meters	-11
401-600 meters	-12

Target Size	Modifier
601-800 meters	-13
801-1,000 meters	-14
Target Moving	Modifier
3-4 m/turn (walking)	-1
5-8 m/turn (jog)	-2
9-16 m/turn (running)	-4
17-32 m/turn (sprinting)	-6
33-64 m/turn (24-42 mph)	-8
65-128 m/turn (highway speeds, train)	-10
129-256 m/turn (small plane, helicopter)	-12
257-512 m/turn (racing car)	-14
513-1024m (1km) /turn (passenger jet)	-16
1025-2048m (2km) /turn (F-18, sound barrier)	-18
2049+ /turn (F-15 on afterburners)	-20

### Ranged Combat Example

A character with REF 5 is standing 40 meters away. His base DEF is 10 + REF (5), or 15. If someone 40 meters away shoots at our character, the GM applies the -6 range modifier to his attack roll against the 15 DEF, making the total TN for the shot 21!

## Action Modifiers

A number of actions that are available to characters impose a modifier to a skill roll, the character's DEF or both. Below is a condensed list of available actions and their modifiers.

For a more detailed description of each action, see *Available Actions*. Note: "Skill Mod" represents the modifier to the attacker's skill roll to perform that action.

Defensive Actions	DEF	Skill Mod	Notes
Block	+2	+1	+4 INI vs. melee attacks next turn if block is successful
Dodge	+3	+0	Up to ½ MOV in meters
Roll with the blow	+2	+0	½ damage
Movement Actions	DEF	Skill Mod	Notes
Balance	-2	+0	Lost Initiative for that Turn.
Crawl	+1	+0	No REF bonus to DEF
Climb	+0	+0	Up to ½ MOV
Dive	+3	+0	Up to ½ STR; req. Leaping roll (TN 10 +2/ meter)
Roll	+2	+0	Roll along ground or over obstacle; up to ½ MOV
Run	Var.	+0	Up to 2x MOV plus one non-movement action at -3; DEF bonus for velocity
Sprint	Var.	+0	Up to 3x MOV; plus one non-movement action at -6; DEF bonus for velocity
Somersault/Flip			
Walk	+0	+0	Up to MOV plus one other non-movement action
Offensive Actions	DEF	Skill Mod	Notes
Aim	+0	+2/turn	+2 per turn (+6 max); No REF bonus to DEF
Bind Weapon	+0	-1	Opponent's weapon immobilized; requires contested (STR + combat skill + 3d6) to break.
Disarm	+1	-2	Disarms opponent

Offensive Actions	DEF	Skill Mod	Notes
Drag	+0	+0	Drag resisting person (STR+1 - opponent's STR) meters; max distance = MOV.
Drop	+0	+0	Fall with Grabbed or Restrained opponent; 2d6 dmg
Grab	-2	-2	Grab one item or limb.
Leap Attack			
Restrained	+0	+0	Fully restrains a Grabbed character; -2 to overcome.
Take-away	+1	-3	Takes opponent's weapon away.
Take-down	-1	-1	Inflicts normal STR dmg as B/S; victim falls to ground
Throw	+1	-1	Inflicts normal STR dmg as B/S; victim thrown to ground
Unarmed Strike	+0	+0	Does STR damage as B/S
Weapon Strike	+0	+0	Does dmg as per weapon

Special Actions	DEF	Skill Mod	Notes
Combination			
Counterstrike			
Fast Draw	+0	-3	+2 INI
Load Weapon	+0	+0	Load a weapon & make ready
Mount	+0	+0	No REF bonus to DEF
Wait	+0	+0	Wait to act later in same turn

## Autofire

A weapon with autofire “puts a lot of lead downrange,” as they say. When making an autofire attack, the player makes a single attack roll using his REF + Weapon Skill + 3d6 against the target's TN. To determine how many rounds hit the target, the effect number is divided by a number based on the type of attack being made.

## Burst

A burst autofire (or “auto burst”) attack consists of firing a short, controlled burst of fire at a single target. The shooter makes an attack roll against the target, with any modifiers for size, distance, and so on. On a successful attack roll, the target is hit by one projectile plus an additional projectile for every 2 full points of effect number. The maximum number of rounds that may be fired in a burst is 4.

*Mike is playing Sergeant Larry Craft, a SWAT team member. Larry has a REF 6 and Submachine-gun skill +6. He is carrying a submachine-gun with a RoF of 20. During a drug raid, Mike's character spots a gunman and fires a burst of four rounds, with a TN of 18. Mike makes his skill roll and gets a total of 24. Because Mike's effect number is 6 (24–18=6), his target is hit by 3 rounds of the burst. Mike rolls the damage separately for each round that hits his target.*

## Stream

A stream autofire attack consists of aiming the weapon at a single target and releasing a stream of rounds or projectiles at it. This is sometimes referred to as “hosing” a target. The shooter makes an attack roll against the target at a –1 penalty for every 10 rounds (or fraction) in the attack, plus any modifiers for size, distance, and so on. On a successful attack roll, the target is hit by one projectile plus an additional projectile for every 2 full points of effect number. The maximum number of rounds that may hit a target is equal to the RoF for the weapon.

*Sergeant Craft spots another gunman. Mike's character fires a stream of 10 bullets at the gunman, with a base TN of 18. Because Mike's character is firing more than a burst, he suffers an additional –1 penalty to his skill roll. Mike gets a 26, minus 1 for the stream penalty, for a total of 25. Because Mike's effect number is 7 (25–18=7), his target is hit by 3 rounds from the burst. Mike rolls the damage separately for each round that hits his target.*

## Spray

With a spray autofire attack, the shooter can attempt to hit multiple targets at once. The width of the area (in meters) must be defined by the player before the attack roll is made. This area is called the “fire zone.”

The maximum number of rounds that can hit a given target in the fire zone is equal to the total width (in meters) in the fire zone divided by the number of rounds being fired, rounding down.

The attacker makes a skill roll for each target, with a -1 penalty for every 10 rounds (or fraction) in the attack, plus any modifiers for size, distance, and so on. On a successful attack roll, the target is hit by one projectile plus an additional projectile for every 3 full points of effect number.

*Sergeant Craft spots three gunmen spread out in a warehouse, and fires a full 20 rounds into a 10-meter-wide area, hoping to hit them all. Each target can be hit by a maximum of 2 rounds (20 divided by 10 = 2). The adjusted Target*



Number (after counting all modifiers) for each target is 15. Jim (Sgt. Craft's player) makes a skill roll for each target, and gets a 14, 19, and 25, respectively. The first target is missed, the second is hit by 2 rounds, and the third is hit by 2 rounds (Jim's effect number was high enough to score 3 hits, but only 2 rounds entered his area in the fire zone).

Method	Modifier	Divide EN by	Max rounds per target
Burst	0	2	4
Stream	-1 per 10 rds	2	RoF
Spray	-1 per 10 rds	3	RoF/Fire zone (m)

## Explosions

Explosive attacks cause damage in an area. Any targets in the area of effect of the explosion are automatically hit by the attack. The type and form of damage depends on the type of explosive attack (see the table below).

Type/Form	Example
Blunt/Stunning	Rubber pellet grenade
Blunt/Lethal	HE grenade or artillery round
Penetrating/Stunning	Flash grenade, stun energy grenade, sound/kinetic wave
Penetrating/Lethal	Anti-personnel mine, HEAP artillery round

## Targeting Explosive Attacks

Explosive attacks may be targeted at a person or object (such as a vehicle), using the normal rules for combat. Because explosive attacks do damage over an area, however, its simpler to use a point on the ground (or a specific hex, if using a hex map) as the target.

Treat a 1 square meter area (or a 1 meter hex) as having a TN of 10 (similar to attacking a person with a base DEF of 10 but no REF bonus), and add any other applicable modifiers to the skill roll, such as modifiers for range, obscured visibility, and so on.

If the attack roll is successful, the attack lands in the intended spot.

If the attack roll fails, the attack misses the target. To see where the attack hits, roll 1d6 to determine the direction from the target, then roll another 1d6 to determine the distance the attack lands from the target. The distance an attack misses the target by is equal to the number of points the attack roll missed by for thrown, simple missile weapon and small arms attacks. Multiply this number times 2 for heavy weapons.

The maximum distance the attack can miss the target by is one half the total distance from the attacker to the intended target.

### Direction Missed Attack Lands

1d6	Attack lands...
1	Left (attack lands to left of target)
2-3	Long (attack lands beyond target)
4-5	Short (attack lands short of target)
6	Right (attack lands to right of target)

## Damage Reduced by Range

The farther a target from the centre of the explosion, the less damage is done to it. An explosive attack does the listed amount of damage in a 1 meter radius. For every additional meter of distance from the centre, the damage is reduced by 3 points. Treat damage below 1 point as 0. The maximum distance at which 1 point of damage is caused indicates the maximum effect radius of the blast. The blast radius of an attack is defined as the number of meters equal to one third of the total damage points done by the attack. (Damage points/3 (round down) = Blast radius in meters)

*An anti-personnel grenade explodes doing 25 points of penetrating lethal (P/L) damage. Any targets within 1 meter of the grenade when it explodes are hit by a 25 point piercing lethal attack; targets 2 meters away suffer a 22 point attack; targets 3 meters away suffer 19 points, and so on, up to 8 meters away, where targets suffer a 2 point attack. Eight meters is the effective "blast radius." Targets nine or more meters away from the explosion's centre suffer no effect from the blast.*

## Average Blast Radius

Rather than calculating the blast radius of the grenade based on the actual damage rolled, GMs can determine the average blast radius for an attack by adding the number of dice of damage for the explosion +1. The resulting number is the maximum blast radius for the explosion, in meters.

The GM decides to use the average blast radius of the grenade. Because the grenade's listed damage is 6d6, the average blast radius of the grenade (when it goes off) is 6+1=7 meters.

Using the average blast radius of an explosion can save the GM a lot of time during the game. For instance, if a 6d6 explosion goes off, the GM knows that the average blast radius of the explosion is only 7 meters. If the closest character is 10 meters away from the explosion, the GM doesn't need to roll any damage dice at all; none of the characters are close

enough to suffer any damage from the explosion. Instead of rolling the damage dice to determine the blast radius, the GM can simply describe the explosion and move on to the next character's action.

## Knockback

Some characters in *Assembler Core* generate so much force with their physical attacks that most targets have trouble staying on their feet. This effect is called **knockback**, and it's a fixture of comics/manga. The rule for knockback is relatively simple:

If the number of dice of damage dealt by a single melee attack equals or exceeds the target's Strength score, the target will be knocked back. This is similar to the AV mechanic, where the character's STR acts as an Armour Value vs Knockback.

There are a few complications, however:

- Characters may not cause knockback with Penetrating (edged or impaling) weapons, at least not if they're used as they're intended. Only Blunt, traumatic impact can cause knockback unless other forms of damage have tweaks which include knockback. Hand-held firearms attacks may not cause knockback, though large weapons like rocket launchers and tank-borne cannons may.
- If the attacker is larger than the target, the amount of damage he must do to cause knockback is decreased. Likewise, if the attacker is smaller than the target, the amount of damage he must deal to cause knockback is increased. Assume that if a target is four or more size levels larger than the attacker, the attacker cannot cause knockback unless some serious "Mighty Ant" strength was being applied.

Size Difference	Damage Modification
1 level	+/-1 Dice
2 levels	+/-2 Dice
3 levels	+/-4 Dice
4 levels	+/-8 Dice

*For example, if a Medium-size character (STR 13) hits a Medium-size character (STR 7) with 6d6+2 points of damage in melee combat, the target will not be knocked back. However, if the target were a Small character with a Strength score of 7, only 6 dice of damage would be required to cause knockback, so the small target would take flight (albeit slightly).*

The distance a character is knocked back depends upon the Strength score of the attacker. Every +5 effective damage points inflicted past the target's STR attribute knocks the target back 1 meter (3ft). For every 3 full meters (10ft) a character is knocked back, he will suffer an additional 1d6 blunt/stunning damage upon landing. Furthermore, whenever a character is knocked back, he must make a Reflex Save against a TN equal to the number of points of damage just dealt to him, or land prone.

*Therefore the small target in the previous example would be knocked back less than a meter and the resulting TN roll is ruled as impossible to fail. The target is shunted back a couple of steps, does not take any falling damage and does not fall prone.*

These rules come into their own when super-strength or other high impact damage is inflicted on a target, potentially flinging them some meters.

## Throwing Heavy Objects

A character may attempt to lift an unusually large object (such as a twenty-pound block of cement, a television set, a small car, or a live great white shark) and heave it at an opponent. Though not as accurate as the use of lightweight throwing implements such as daggers and hatchets, hurling large objects can be an impressive and battle-winning stunt.

Generally speaking:

- A character may attempt to heave any object weighing a number of pounds equal to his "carry load" or less. For example, a character with a Strength score of 18 could attempt to heave an object weighing 3200kg or less.
- The range a heaved object is 10 meters (30ft) when that object is the maximum carry weight possible. For every strength level below capacity, increase by another 10 meters. This means a STR 18 can fling a 2400kg object twenty meters (60ft).
- A heaved item deals damage equivalent to the weight of the object (see the Applying Strength table).

A character heaving an object suffers a -4 penalty to his attack roll in addition to any penalties imposed for aiming at a target more than 1 range increment away.

## Damage

Damage is categorized by its method of delivery (i.e., the "form") and its effect (i.e., the "type"). There are three types and three forms of damage. All damage effects in the core rules use one descriptor from each category. For example, damage from a knife wound is considered Penetrating Lethal damage (abbreviated as "P/L"). Each is explained below.

## Types of Damage

The three basic Types of damage are Blunt (B), Penetrating (P), and Special (Sp).

### Blunt

Blunt damage represents damage caused by blunt force (known as "blunt trauma" in the medical world). Examples of blunt damage include damage caused by punches and kicks, falling, collisions, clubs, and the like.

When a character suffers blunt damage, subtract the value of any armour the character is wearing and also the character's TGH score from the damage, then subtract any remaining damage points from the character's LIF.

## Penetrating

Penetrating damage represents damage from an injury that penetrates the body, such as damage caused by bladed and pointed weapons, arrows, fast-moving projectiles, and the like. As such, the TGH attribute is bypassed by Penetrating types of damage.

When a character suffers penetrating damage, subtract the value of any armour the character is wearing, then subtract any remaining damage points from the character's LIF.

## Special

Special damage represents damage or other effects from unusual attacks, such as gas, drugs (e.g., stimulants or anaesthesia), magic spells, radiation, mental powers, and the like. Any attack that bypasses TGH or AV is a Special type of damage.

## Forms of Damage

The three basic Forms of damage are Stunning (S), Lethal (L), and Special (Sp).

### Stunning Damage

Stunning damage is damage that temporarily weakens or incapacitates the character. Stunning damage can render a character unconscious but cannot kill him. It reflects the non-lethal and temporary effects of special substances and substances, such as pepper spray (oleoresin capsicum or "OC"), sleep gas, flash-bang grenades, depressants (such as alcohol or barbiturates), the dazing effects of a punch or mild concussion, sedation, general weakening from fatigue, and so on.

A character may also be stunned or knocked unconscious by one mighty blow. Any time characters suffer an amount of damage from a single event or attack that exceeds half their LIF score (round up), after subtracting TGH (if applicable), they are stunned. A stunned character's STR, REF, PRE, and INT all drop to 0 for as long as the character is stunned. In addition, stunned characters lose their next action, which is spent "recovering from being stunned." On the subsequent turn, the character has recovered and may act normally.

If a character has not yet acted in the turn in which he is stunned, he loses his action for that turn but may act normally on the next (second) turn. If a character has acted in the turn in which he is stunned, he loses his action for the next (second) turn and may act normally on the following (third) turn.

*Kyle's character has 20 LIF points and a TGH of 5. He is hit by a punch for 17 points of blunt damage. Kyle subtracts his character's TGH from the damage, leaving 12 points of damage. Because 12 is more than half his character's LIF, Kyle's character is stunned for one turn.*

At the GM's discretion, a stunned character may go completely limp, fall down, or otherwise lose the ability to maintain his current action (for example, hold a rope, stay in the saddle, etc.). A stunned character has a base DEF of 10, with no bonus for REF.

When a character's LIF is reduced to 0 because of stunning damage, the character immediately falls unconscious. An unconscious character will not regain consciousness until his LIF is raised to a score of 1 or higher, whether through healing, natural recovery, or medical or supernatural aid.

Stunning damage is healed more quickly than lethal damage (see *Recovery*).

### Lethal Damage

Lethal damage is that damage that can kill a character. Lethal damage can render a character unconscious as well as kill him. Lethal damage can reflect the effects of a trauma or injury caused by weapon, a collision such as from an auto accident or a fall from a great height, the effects of high doses of radiation, extreme weakening from illness, and so on.

When a character suffers a number of points of lethal damage that exceeds his LIF, the character is dying. A dying character will lose 1 additional LIF point each turn until he reaches -10 LIF. Medical intervention is necessary to prevent the character from dying (see *Stabilizing*, page 96). If a character's LIF score reaches -10, the character is dead.

Lethal damage is healed more slowly than stunning damage.

### Special Damage

Special damage is damage to some aspect of the character other than the character's LIF. Examples include the reduction of an attribute, the suppression of a paranormal power, medical symptoms (such as hallucinations or nausea) and so on.

This category is a catch-all, for any effects that can't be clearly defined as either stunning or lethal.

## Applying Strength (STR)

The limits and capacity of the Strength and Super Strength attribute is shown in the table below. Game masters can also use this table to quantify the damage of gaming events by using the various columns on the strength table. For example, estimating a vehicle's STR could be done by using the carry column to work out how many tonnes the vehicle can tow/hold then trace that tonnage back to a STR attribute. A building falling down around a character can inflict damage equivalent to the chunk's weight under the Dead Lift column. Between the Falling table and the STR table, the game master has many options in assigning gaming damage to unusual situations.

## Wounds and Effects of Damage

Wounds come in progressive levels of severity, from Superficial to Fatal. The description for each level of wound severity and its effects are explained below.

### Superficial Wounds

Any wound from which a character suffers up to 1x HLT in damage points (after subtracting any damage for Armour or TGH) is a superficial wound. Superficial wounds include minor cuts, scrapes and bumps.

Superficial wounds do not restrict or reduce the character's movement, attributes or skills, although they may be painful.

In medical terms, characters suffering from superficial wounds are conscious and comfortable (at least as far as the injury goes), their vital signs are stable and within normal limits, and indicators point toward an excellent recovery. Medical patients suffering from one or more superficial wounds are generally considered in "good condition."

## Light Wounds

Any wound that causes up to 2x HLT in damage points (after subtracting any damage for Armour or TGH) is a light wound.

Not exactly superficial damage, but there is little if any chance a character will die from light wounds. The character will lose 1 additional LIF point each day for 1d6 days until stabilized (see *Stabilizing*).

All Body-based skill rolls are at -1 until the character receives medical aid. This penalty may be ignored for one turn with a successful Tricky WIL attribute roll (TN 15).

In medical terms, characters suffering from superficial wounds are conscious but generally uncomfortable, though their vital signs are stable and within normal limits. Indicators point toward a favourable recovery. Medical patients suffering from one or more light wounds are generally considered in "fair condition."

## Serious Wounds

Any wound that causes up to 3x HLT in damage points (after subtracting any damage for Armour or TGH) is a serious wound.

Serious wounds are just that. The character is wounded in such a way that seriously impedes his ability to do anything. Serious wounds include some gunshots, broken limbs, and major burns.

Left untreated, serious wounds can pose a serious health risk from infection, bleeding, and other serious complications. The character will lose 1 additional LIF point each hour until stabilized (see *Healing*, below).

All Body-based skill rolls are at -3 until the wound is stabilized and then -1 until treated. Any Mind-based skill rolls are at -3 until treated. These penalties may be ignored for one turn with a successful Challenging WIL attribute roll (TN 18).

In medical terms, characters suffering from serious wounds are acutely ill. They may not be conscious, their vital signs are unstable and not within normal limits. Indicators are questionable. Medical patients suffering from a serious wound are generally considered in "serious condition."

## Critical Wounds

Any single wound causing up to 4x HLT in damage points (after subtracting any damage for Armour or TGH) is a critical wound. Critical wounds do not close and will not just stop bleeding. Critical wounds include torn limbs, deep punctures, and lacerations, severe head trauma, and so on.

Critical wounds can be fatal without immediate stabilization and fairly quick medical treatment. A character with a critical wound will lose one additional point of LIF per minute until he is stabilized.

All Body skills are at -6 until stabilized and -3 until treated. Any Mind-based skill rolls are at -6 until treated. These penalties may be ignored for one turn with a successful Challenging WIL attribute roll (TN 18).

In medical terms, characters suffering from critical wounds may not be conscious, their vital signs are unstable and not within normal limits, and indicators are unfavourable. Medical patients suffering from a critical wound are generally considered in "critical condition."

## Fatal Wounds

Any wound from which a character suffers more than 4x the victim's HLT in damage points (after subtracting any damage for Armour or TGH) is a fatal wound. The character will die without immediate aid. Characters suffering from a fatal wound will lose 1 additional LIF point each turn unless stabilized (see *Healing*, below). Otherwise, treat this as a Critical Wound.

### Wound Effects Table

Wound	Effects
Superficial	None.
Light	-1 to Body-based skills until medical aid received; -1 LIF per day for 1d6 days unless stabilized.
Serious	-3 to Body-based skill rolls until stabilized, then -1 until treated; -3 to Mind-based skill rolls until treated. -1 LIF per hour until stabilized.
Critical	-6 to Body-based skill rolls until stabilized, then -3 until treated; -6 to Mind-based skill rolls until treated. -1 LIF per minute until stabilized.
Fatal	-1 LIF per turn until stabilized; otherwise, treat as Critical.

## Recording Damage

Damage that a character suffers should be marked on the character sheet in the boxes provided. Stunning damage is marked as a slash ("/") and lethal damage is marked as an "X."

A character suffers 2 points of lethal damage from a knife cut to the arm and 6 points of stunning damage from a kick to the chest. The damage from the knife wound is recorded on the character sheet as two "Xs" and the wound from the kick as six slashes.

If a character has suffered a total amount of combined stunning and lethal damage to bring his LIF to 0, any

subsequent lethal damage should be recorded over (i.e., “replacing”) any stunning damage on the character sheet. Any subsequent stunning damage is treated as lethal damage.

*Mike’s character has 20 LIF. During a fight he suffers 12 points of stunning damage and 8 points of lethal damage. Because the combined total of damage is 20, he is unconscious. He is then hit again for 5 points of lethal damage. Mike changes 5 of the slash marks (that indicate stunning damage) to “Xs” (indicating lethal damage).*

## Healing

There are three basic parts to healing damage sustained by your character. Stabilization prevents the wound from becoming worse; Treatment repairs the damage sustained; Recovery heals the body.

For GMs who want simpler rules for healing, simply ignore the rules for Stabilization and make Treatment optional, relying primarily on Recovery to determine a character’s healing rate. This has the affect of lowering the mortality rate for characters who are seriously injured.

For all First Aid and Physician skill rolls, the following situational modifiers apply. Note that in some settings or genres, some of these situations will not apply (e.g., “ample medical supplies” are simply not available in a medieval setting).

### Situational Modifiers

Condition	Modifier
Very dirty or unsanitary conditions	-2
Makeshift sick bay (a bedroom or office)	-1
Improvised equipment and supplies	-1
Adequate medical supplies (first aid kit, med-pac)	+1
Ample medical supplies (sick bay, hospital)	+3

## Stabilizing

Stabilizing a patient is the immediate treatment of an injury to prevent worsening of the injury or condition. This could involve setting a compression bandage, immobilizing an extremity (such as putting a splint on a limb with a broken bone), or tightening a tourniquet.

A successful First Aid or Physician roll will stabilize the wound, preventing the loss of any additional LIF, for a period of time. The difficulty of the skill roll is based on the severity of the wound (see the *Stabilization Table*, below). At the end of this time a new skill roll is required. A failed roll means that the character suffers additional damage, as per the severity of the injury (see *Wounds and the Effects of Damage*).

*Jim’s character has suffered a serious gunshot wound and has already suffered 23 points of damage, reducing his LIF to 2. He will continue to lose LIF points at the rate of 1 point per minute unless he receives medical aid. Luckily Tony’s character has the First Aid skill. Tony makes his First Aid roll, so Jim’s character will not lose any more LIF for that minute. Tony then makes another First Aid roll for the second minute but fails. Jim’s character loses another point of LIF, lowering his score to 1. Tony rolls again for the third minute and succeeds! Fortunately for Tony the paramedics have arrived, who have better First Aid scores and can transport Jim’s character to the hospital for treatment.*

*Stabilization allows a patient to be moved to a medical facility, whether by ambulance or some other conveyance, for treatment. It would also allow time for a priest to prepare a healing prayer or a late night flight to the Trauma Center in an aerodyne, depending on the genre being played.*

### Stabilization Table

Wound	Difficulty	Roll required
Superficial	No roll required	No roll required
Light	Average (TN 12)	every day
Serious	Tricky (TN 15)	every hour
Critical	Challenging (TN 18)	every minute
Fatal	Difficult (TN 21)	every turn

## Treatment

Treatment is the active part of medicine. The doctor or medic will suture, medicate and repair some of the damage caused by an accident or violent event. This may include surgery to remove foreign objects, pin broken bones, remove dead tissue or toxins, and so on.

Treatment usually occurs within 24 hours; although some types of treatment may take longer, these will not usually have a doctor as an active participant. These include long-term antibiotics, chemotherapy treatments, and the like.

Successful treatment can remove or “heal” up to one half the damage caused by a wound. The time required to properly treat the patient is shown on the Treatment Table below, based on the severity of the wound (note: this is “game time,” not real time). At the end of the time period indicated, the treating character makes a Physician or Surgery skill roll (GM’s discretion), using the target number indicated. Success indicates the patient has been completely stabilized and will not lose any more LIF due to the wound. In addition, for every 2 points of the effect number for the skill roll (rounding up), the patient regains 10% of the lost LIF from the wound, up to a maximum of 50%.

*Nick’s character, Doctor Barrett, is working feverishly to save a patient that’s just been brought to the emergency room. The patient has suffered 24 points of Special/Lethal damage from an explosion. Because the wound is a critical*

wound, Dr. Barrett must spend 2d6 hours working on the patient before Nick can make a Physician roll. The GM rolls 2d6 and gets 5. After 5 hours of game time, Nick must make a Difficult Physician skill roll (TN 21). Nick rolls a total of 24! The patient has been stabilized and will lose no more LIF points due to his injury. In addition, the patient regains 20% of the LIF lost due to that wound.

## Treatment Table

Wound	Difficulty	Time required
Superficial	No roll required	No roll required
Light	Average (TN 12)	1d6 minutes
Serious	Challenging (TN 18)	1d6 hours
Critical	Difficult (TN 21)	2d6 hours
Fatal	Demanding (TN 24)	2d6 hours

## Recovery

Recovery is the type of healing that the body does on its own. Characters heal a number of LIF points each healing period equal to their HLT. The rate at which a character heals depends on the reality level of the game or campaign.

## Recovery Rate

Campaign level	Damage Type		
	Stunning	Lethal	Special
Realistic	Hour	Week	Month
Cinematic	Minute	Day	Week
Extreme	Turn	Day	Day

# Weapons

## Weapon Attributes

Each weapon has several attributes that describe and rate its performance within the rules.

The attributes that describe melee weapons are Damage (abbreviated “Dmg”), Type, Size, Initiative modifier (abbreviated as “Init”—note that this is not the same as the INI derived attribute for characters), Accuracy modifier (abbreviated “Acc”), Strength minimum (abbreviated “STR”—note that this is not the same as the STR derived attribute for characters), Weight (abbreviated “Wt”), Cost, and Notes.

The attributes that describe ranged weapons are Damage (abbreviated “Dmg”), Type, Size, Accuracy modifier (abbreviated “Acc”), Strength minimum (abbreviated “STR Min”—note that this is not the same as the STR derived attribute for characters), Maximum effective range (abbreviated “Max”), Rate of fire (abbreviated “RoF”), Ammunition capacity (abbreviated “Amm”), Weight (abbreviated “Wt”), Cost, and Notes.

## Damage (Dmg)

The damage rating for the weapon indicates the number of dice of damage the weapon inflicts when used by a character with STR equal to the minimum STR score required for the weapon.

Ray's character, Spike, has a STR of 3. Spike picks up a chain during a fight. The chain has a damage rating of 3d6 and a STR minimum of 3. Because Spike's STR is equal to the minimum STR required for the chain, Spike will inflict 3d6 when he strikes an opponent.

GMs wishing to use the “flat rate” method of determining damage can convert the listed weapon damage by multiplying the number of dice times 3 and then adding any bonuses

Spike normally does 3d6 of damage with his chain. To convert the damage to flat rate damage, Ray simply multiplies the number of dice times three. Spike does 9 points of damage when using the flat rate method.

Characters with more STR than the listed minimum strength for the a weapon will do extra damage with that weapon. Characters with less STR than the listed minimum strength for a weapon may do less damage with that weapon. (See *STR Min*, page 98).

## Type

This describes the type of damage that the weapon inflicts. The letter before the slash represents:

B = Blunt (TGH & Armour apply)

P = Penetrating (only Armour applies)

Sp = Special (TGH and Armour may not apply; see notes).

The letter after the slash represents:

S = Stunning damage

L = Lethal damage

Sp = Special damage (see notes for effect).

For example, “P/L” indicates the weapon does penetrating lethal damage, so Armour but not TGH is subtracted from the damage before applying it to the character's LIF.

See *Damage* for more information about types and forms of damage and their effects in the game.

## Size



Each weapon has an “optimal distance.” This is the distance that the user must be from his opponent in order to effectively and properly wield the weapon.

The optimal distance is 1 meter for short weapons (such as knives, short swords, punches and grappling maneuvers), 2 meters for medium weapons (such as swords, clubs and kicks), and 3 meters for long weapons (such as most pole-arms).

When both characters are fighting with the same sized weapons, neither character receives a bonus, even if they are at the optimal distance for their weapon.

When characters are using weapons of different sizes, however, the character with the longer weapon receives a +3 INI and +3 DEF bonus. If the opponent successfully strikes with the shorter weapon, then the bonus is reversed, to simulate that the character with the shorter weapon “got inside” the other’s defenses to his own optimal distance. If the character with the longer weapon retreats back to his optimal striking distance, he regains the advantage and respective bonuses.

Jim’s character is a gladiator fighting in the coliseum. He is using a spear and his opponent is using a short sword. Because Jim’s spear is a Long weapon, his weapon’s optimal distance is 3 meters, while his opponent’s is 1 meter because he is using a Short weapon. As long as Jim’s character remains 3 meters away from his opponent, he will receive a +3 bonus to both his INI and his DEF. If his opponent successfully strike Jim’s character, however, that means he has slipped into his own optimal distance—1 meter—and gains the +3 bonus to his own INI and DEF, and Jim loses the bonuses.

## Initiative Modifier (Init)

Some weapons are bulkier and more awkward to wield than others, and some are smaller or better balanced and easier to use. To reflect these differences in weapon design, weight and balance, each weapon has a base Initiative Modifier (abbreviated “Init”). This modifier is applied as a temporary modifier to the INI score of the character using the weapon. The Initiative Modifier may be a positive number (e.g., +1), a negative number (e.g., -1), or zero.

If the character stops using the weapon the modifier no longer applies. If the character switches to a different weapon, then the new weapon’s Initiative Modifier is used.

The Initiative Modifier is in addition to any INI modifiers for STR (see *STR Minimum*, below) or any other INI modifiers that may be available in your game, such as from supernatural abilities, special traits, and so on.

## Accuracy (Acc)

Accuracy reflects the inherent accuracy of the weapon. The Accuracy modifier (abbreviated “Acc”) is added to the character’s skill roll (not the TN) when using the weapon.

Gail is playing Elissa Longstreet, a spy for the Colonial Army, in a game set in the U.S. Revolutionary War. Elissa has a Black Powder Weapons skill of 5. During the game she is spotted trying to sneak through British-held territory. As two armed British soldiers approach her, she draws a musket pistol she had hidden in her bag and fires at one of the soldiers. Because black powder weapons are inherently less accurate than modern guns, they have an Acc of -1. When making a skill roll for Elissa to hit the British soldier, Gail subtracts 1 from her character’s skill of 5, making her effective score a 4.

## Range Modifier (RMod)

The Range Modifier reflects the inherent accuracy of the weapon at longer ranges. The Range Modifier (abbreviated “RMod”) is a bonus usable only to offset or cancel negative modifiers due to range. For example, a Range Modifier of +2 means that a character using the weapon treats a -4 penalty for distance as only a -2 penalty. A weapon’s Range Modifier may not decrease modifiers for distance below 0.

## STR Minimum (STR Min)

Most weapons have a minimum STR score. This is the minimum STR score required to wield the weapon effectively. Large, bulky or unbalanced weapons will have a higher STR minimum than small, balanced weapons. A weapon with “Crew” listed in the STR Min. column requires two or more people working together to operate the weapon, and no bonus or penalty is afforded regardless of their STR scores.

If a character has a STR score lower than the listed STR minimum for the weapon he is using, the character will incur a penalty to both INI and to any skill rolls made for using the weapon. For every point below the STR minimum, the character suffers a -1 INI and -1 to all skill rolls involving that weapon. In the case of melee weapons and bows, the character also does 1d6 less than the listed damage for the weapon.

These penalties are in addition to any initiative (Init) and accuracy (Acc) modifiers listed for the weapon. If damage for a melee weapon is reduced to “0d6” due to insufficient STR, then the character cannot wield the weapon well enough to inflict damage with it in a fight.

*Bob has a STR 4, REF 5, and Machine-guns 5. Bob picks up a B.A.G. 92 machine-gun that has ACC -2, Init. -1, and STR Min 6. Bob’s STR is 4 (2 less than the listed STR Min of 6), so he incurs a -2 to his Initiative and to his skill rolls. The total modifier to his skill rolls is -4, and the total modifier to his Initiative is -3. Bob’s skill roll formula would look like this: REF (5) + Skill (5) + ACC (-2) + STR penalty (-2) + 3d6... or 3d6 + 6.*

If a character has a STR score higher than the listed STR minimum for a melee weapon he is using, the character does extra damage. For every point of STR the character possesses above the listed STR minimum of the weapon, the character does an extra 1d6 of damage, up to a total maximum of twice the listed damage for the weapon. Having a high STR does not allow a character to do extra damage with a bow, crossbow, firearm or energy weapon.

*Bob’s machine gun has run out of ammo, but the bad guys are still coming, so Bob pulls out his trusty fighting knife. A knife has a listed STR Min of 2 and a base damage of 1d6. Because Bob’s STR of 4 is two points above a STR Min of 2, Bob can inflict as much as +2d6 damage when he hits with the weapon. Unfortunately for Bob, 3d6 is more than two times the base damage for a knife, so Bob does only 2d6 points of damage with the knife. But that’s still better than normal damage, and Bob’s feeling pretty mean...*

## Maximum Effective Range (Max)

Maximum effective range (abbreviated “Max”) is the maximum range at which a ranged weapon, such as a bow or firearm, can reasonably hit a target at which it is aimed. While weapons can fire a projectile (e.g., an arrow or bullet) beyond the listed maximum effective range, the chances of hitting a target at this range becomes a matter of sheer luck rather than skill. As a result, shots beyond Max range are not allowed.

## Rate of Fire (RoF)

A weapon’s rate of fire (abbreviated “RoF”) indicates how often a ranged weapon may be fired and how many rounds are expended each turn. A whole number indicates the maximum number of rounds that may be fired per turn. A fraction indicates the number of turns required to reload the weapon between shots (e.g., “1/3” means the weapon can be fired once every three turns). More than one number separated by a colon indicates the weapon is capable of multiple rates of fire (e.g., 3: 20 indicates the weapon is capable of firing either 3 shots per turn or 20 shots per turn). In such cases the player selects which rate of fire to use at the beginning of his character’s action.

## Ammunition (Amm)

Ammunition capacity (abbreviated “Amm”) indicates how many rounds of ammunition are contained in a ranged weapon or in an attached supply, such as a battery or magazine.

Simple missile weapons, such as crossbows and slings, have an Amm. Rating of 1 because they can’t “hold ammo” (they can only fire a single arrow or stone that is loaded and readied for use).

## Weight (Wt)

The weight of the weapon, listed in kilograms.

For players wishing to convert to pounds, simply multiply the listed number by two. The actual conversion is 2.2 pounds to a kilogram, but multiplying by 2 is easier and still provides a good approximate conversion.

If you are not keeping track of the weight of equipment or other items carried by the characters in your game, then you can ignore this number.

## Notes

Notes contain additional information about a weapon, such as examples of the type of weapon, special effects, and special uses of or exceptions to the basic rules.

The following annotations are used in the core rules:

**AB:** Auto-burst (the weapon may be fired using the autofire rules for Burst only; no Stream or Spray attacks are allowed with this weapon)

**AF:** Autofire (the weapon may be fired using the rules for autofire)

**AP:** Armour piercing (on a successful attack using this weapon, the AV of the target is halved before subtracting it from the damage caused by the attack)

**BA:** Bolt action

**EX:** Explosion (attacks using this weapon are made using the rules for Explosions)

**PA:** Pump action

**LA:** Lever action

**SA:** Semi-automatic

**RD:** Revolver, double-action

**RS:** Revolver, single-action

Extensions and Variants may include special rules that apply to weapons. These will be listed under “Notes” for weapons that use rules presented in those Extensions and Variants.

Steve is running a sci-fi game in which needler pistols are able to penetrate Armour better than most weapons. Steve decides that the “Armour piercing” ability effectively halves the Armour value of the target, and notes “AP” for needlers on the weapon list under “Notes.”

## Costs

The Character point cost for the weapon. This figure is very handy for those gadget or equipment-based heroes and allows for a point-costed balance within the super-group.

## Sample Weapon Lists

### Melee Weapons

Weapon	Dmg	Type	Size	Init	Acc	STR	Wt	Notes
Ax, hand	2d6	P/L	M	0	0	3	1	
Bat, aluminum	3d6	B/L	M	-1	0	3	1	
Bat, wood	3d6	B/L	M	-1	0	3	2	
Baton, police	2d6	B/L	M	0	0	2	.5	
Bayonet	2d6	P/L	M	-2	0	3	.5	Adds to rifle weight
Energy sword	5d6	P/L	M	+1	-2	2	.5	
Stun baton	4d6	B/S	M	0	0	2	.5	

Weapon	Dmg	Type	Size	Init	Acc	STR	Wt	Notes
Vibro-ax	5d6	P/L	M	-1	-1	4	6	
Vibro-knife	2d6	P/L	S	+1	0	2	.25	
Vibro-sword	4d6	P/L	M	0	0	3	4	

## Ranged Weapons

Weapon	Dmg	Type	Acc	Rmod	STR	Max	RoF	Amm	Wt	Notes
Boomerang	3d6	B/L	-2	0	3	x10	—	1	.5	
Compound bow	4d6	P/L	0	+2	3	x20	1/2	1	2	
Crossbow, small	2d6	P/L	0	+2	3	50	1/3	1	2	
Crossbow, heavy	3d6	P/L	-1	+1	4	50	1/4	1	3.5	
Short bow	3d6	P/L	0	+2	3	100	1/2	1	2	
.25 ACP semi-auto	1d6	P/L	-1	+1	2	50	4	6	.5	SA
.22 short semi-auto	1d6	P/L	-1	+2	2	50	4	6	.5	SA
.32 ACP revolver	2d6	P/L	0	+2	3	50	3	6	1	RD
.22 LR semi-auto	2d6	P/L	-1	+1	2	50	4	12	1	SA
9mm short	2d6+2	P/L	0	+2	3	50	4	6	1.5	SA
.45 ACP (1980)	3d6	P/L	0	+2	3	50	4	7	2	M-1911A1, SA
9mm Para	4d6	P/L	0	+2	3	50	4	15	2	SA
.357 Mag. 6" barrel	4d6	P/L	0	+2	3	50	3	6	2	RD
10mm Auto	4d6	P/L	0	+2	3	50	4	10	2	SA
.41 Mag. 6" barrel	5d6	P/L	0	+2	4	50	3	6	2.5	RD
.44 Mag. 6" barrel	5d6	P/L	0	+2	4	50	3	6	2.5	RD
.50 Desert Eagle	6d6	P/L	0	+2	5	50	4	10	3	SA
12 gauge slug	6d6	P/L	+1	+4	5	100	2	5	3	PA; 5 or 8-rd magazine.
.30 carbine	5d6	P/L	+1	+3	4	200	4	5	3	BA or LA
5.56mm M-16A2	5d6+2	P/L	+1	+4	4	500	4: 20	30	3.5	SA/AF/AB
7.62x39mm NATO	7d6	P/L	+1	+4	4	600	4: 20	30	4	SA/AF/AB; FN-FAL
.50 cal. rifle	9d6	P/L	+1	+4	6	1000	3	5	6	SA; Barrett M82A1
Blaster pistol	4d6	P/L	0	+2	2	100	1	30	1	
Blaster carbine	6d6	P/L	+1	+3	3	200	1: 5	40	2	
Blaster rifle	8d6	P/L	+1	+4	5	400	1	30	4	
Holdout Laser	3d6	P/L	-1	+1	2	50	1	20	.5	
Laser pistol	4d6	P/L	0	+2	3	100	1	25	1	
Laser rifle	6d6	P/L	+1	+4	4	500	1	50	3	
Needler pistol	3d6	P/L	0	+2	3	50	1	20	1	AP
Troop Machine Gun	5d6+2	P/L	+1	+4	4	1000	20	100	9	Carried; AF; M-60
Heavy MG .50 cal.	9d6	P/L	+2	+5	Crew	1000	20	100	30	AF, mounted; M-2
Flame-thrower	4d6	B/L	+2	+2	4	40	1	50	32	M2-2
Grenade, frag.	6d6	P/L	0	0	3	STRx5	1/2	—	.4	M33A1, M57; EX
Grenade, tear gas	6d6	Sp/S p	0	0	3	STRx5	1/2	—	.4	M47 (CS); EX
Grenade, stun	6d6	B/S	0	0	3	STRx5	1/2	—	.4	"flash-bang"; EX
M1 Rocket Launch.	10d6	P/L	+1	+3	4	110	1/5	1	6	WWII Bazooka
M72A2 LAW	10d6	P/L	+1	+2	2	350	1	—	2.4	Disposable weapon; EX
Mortar, 81mm	12d6	P/L	+1	+4	Crew	1000	1/2	1	18	EX
Rocket Propelled Gren.	10d6	P/L	+1	+3	3	100	1/4	1	6	RPG-7; EX

# Armour

## Armour Attributes

Like weapons, Armour has several attributes that describe its performance within the rules. These are not the same kinds of attributes that characters have, but they serve a similar function.

The attributes that describe Armour are Armour Value (AV), Locations covered (Loc), Strength minimum (abbreviated "STR Min"), Weight (abbreviated "Wt"), Cost, and Notes.

### Armour Value (AV)

The Armour Value indicates the amount of points of protection that the Armour affords. Each point of AV reduces damage inflicted upon the character by 1 point. For example, an AV of 10 would reduce a 16 point attack to a 6 point attack. The Armour's AV protects from all forms of damage unless otherwise noted in the description (e.g., chain mail is flexible and does not protect as well against Blunt and piercing attacks as it does cutting attacks).

### Locations Covered (Loc)

The numeric body locations (from the *Random Hit location Table*, on page 178) that the Armour protects. The AV of the Armour is applied to any attacks that strike one of the protected areas.

If the GM is not using Hit Locations in your game, you can ignore these numbers.

### STR Minimum (STR Min)

The minimum STR score required to move about and fight unencumbered by the Armour. Armour that is rigid, heavy and/or restricts air flow will have a higher STR Min than Armour that is less cumbersome, allows air to circulate around the wearer's body (to "breathe" and release heat) and doesn't restrict the wearer's range of motion.

If a character has a STR score lower than the listed STR minimum for the Armour he is wearing, the character will incur a penalty to his REF. For every point below the STR minimum, the character suffers a -1 to REF and MOV. This temporary reduction in REF also affects the character's INI, and of course any REF-based skill rolls.

*Bob has a STR 4 and REF 5. Bob puts on a suit of full samurai Armour, which has a STR Min of 4. Because Bob's STR is 1 less than the STR Min of the Armour, Bob suffers a temporary -1 to his REF and MOV for as long as he wears the Armour.*

*If a character has a STR score higher than the listed STR minimum there is no bonus.*

### Weight (Wt)

The weight of the Armour, listed in kilograms.

If you are not keeping track of the weight of equipment or other items carried by the characters in your game, then you can ignore this number.

### Notes

Notes contain additional information about the Armour, such as "1/2 AV vs. Blunt damage."

## Armour List

Item	AV	Loc	STR Min	Wt.	Notes
Clothing, light	1	Varies	0	1	Typical spring/summer garb
Clothing, heavy	2	Varies	1	4	Typical fall/winter garb
Brigandine	8	7-15	4	4	½ AV vs. Blunt damage
Chainmail	12	3, 5-15	5	10	½ AV vs. Blunt damage
Football helmet	10	3-4	2	2	American football (e.g., NFL)
Football pads	10	7-8, 10-11, 13-15	4	8	American football (e.g., NFL)
Helmet, kevlar	14	3-4	2	1	Military/police helmet
Leather	6	7-15	3	2	½ AV vs. Blunt damage
Modern body Armour					"Bullet proof vest"
Level IIA	10	7-12	3	1	½ AV vs. pointed weapons
Level II	12	7-12	3	1	½ AV vs. pointed weapons
Level IIIA	14	7-12	3	1.5	½ AV vs. pointed weapons
Level III	16	7-12	4	1.5	½ AV vs. pointed weapons
Tactical	8	6-13	5	2	½ AV vs. pointed weapons
Trauma plate	20	13	2	.5	
Plate Armour, full	16	3-18	8	30	½ AV vs. Blunt damage
Plate Armour,					

partial

plate sections	16	3-4,7-13	6	20	½ AV vs. Blunt damage
chain sections	12	5-6,14-18	—	—	½ AV vs. Blunt damage
Samurai Armour	14	3-18	5		½ AV vs. Blunt damage
Space suit, modern	6	3-18	5	125	20th cen., includes 7 hrs life suppt
Space suit, future	10	3-18	3	25	Sci-fi, includes 24 hrs life suppt
Trooper Armour	15	3-18	3	6	Sci-fi; ½ AV vs. Blunt damage

## Inanimate Objects

Eventually there will come a time when the GM or one of the players will want to know whether an attack can penetrate some material, whether it be a cinder block wall, a door, or even the side of a tank.

While living creatures have LIF points, non-living things have Hits. Hits work just like LIF points do, except that an object that has its Hits reduced to 0 doesn't "die" (the object isn't alive in the first place). Instead, when an object's Hits are reduced to 0, the object is presumed destroyed. "Destroyed" can mean several things, depending on the nature of the object and the GM's judgment. A "destroyed" vehicle becomes inoperable, a window is broken, a brick is broken, a wooden door is broken down, and so on.

When an object has sustained damage equal to twice its Hits, it is demolished, and is beyond repair. A "demolished" vehicle is crushed flat, a window is shattered, a brick is pulverized, a wooden door is splintered, and so on.

## Realistic Values

The table below lists the Hits required to penetrate or break for some common materials that may be encountered in games of various genres. GMs wanting to apply an AV to an item (e.g., in order to keep track of cumulative damage) should split the number evenly between AV and Hits. For example, a two-inch-thick aluminium plate is listed as having 210 Hits. The plate could be treated as having an AV of 105 and 105 Hits.

Obviously if a listed item does not appear or even exist in your game setting you can ignore it.

## AV of Common Materials

	Thickness				
	10mm	20mm	50mm	150mm	1m
Material	(.4")	(.8")	(2")	(6")	(1.3 yd)
Aluminium alloy	14	28	70	210	1400
Bronze	10	20	50	150	1000
Cement	2	4	10	30	200
Glass	1	2	5	15	100
Plexiglas, anti-ballistic	12	24	60	180	1200
Plexiglas, standard	2	4	10	30	200
Steel, tempered	26	52	130	390	2600
Steel, mild	18	36	90	270	1800
Stone	2	4	10	30	200
Wood, heavy	2	4	10	30	200
Wood, soft	1	2	5	15	100

## Cinematic/Extreme Values

For GMs wanting the AV and Hits values for items in Cinematic- and Extreme-level games, use the optional AV/Hits table below. Games with an anime or superhero reality level should use these values, as they will provide a more powerful feel to the game, allowing the characters to have a greater affect on the world around them than if using the realistic Armour values of substances, as listed in the table above.

## Object AV/Hits Table

### Material or Object

Doors	AV	Hits
Airlock door	24	21
City gates, small, wood	15	30
City gates, large, wood	24	60+

<b>Material or Object</b>		
Interior wood door	6	9
Interior starship door	18	12
Exterior wood door	12	9
Metal fire door	15	15
Safe door	30	9
Vault door, small	45	24
Vault door, large	48	27
<b>Furniture</b>	<b>AV</b>	<b>Hits</b>
Bookcase, small	9	12
Bookcase, large	12	18
Bookcase full of books	12	24
Card catalog, wood	12	21
Chair, standard	9	9
Chair, high-back, leather	9	12
Chamber pot	6	6
Computer, personal	6	6
Computer, mainframe	9	15
Desk, small	9	12
Desk, large wooden	12	18
Desk, large metal	15	24
Filing cabinet, small metal	12	12
Filing cabinet, large metal	15	18
Furniture, light wood	9	9
Furniture, heavy wood	12	15
Furniture, plastic	6	9
Furniture, steel-reinforced	15	15
Glass	2	3
Glass, reinforced	6	3
Hearth/fireplace	15	30
Lamp post, breakaway	15	9
Mantel	9	9
Painting, small framed	6	3
Painting, large framed	9	3
Picnic table	9	21
Planter, large	9	9-18
Stanchion, metal	9	6
Stanchion, plastic	3	2
Table, medium	9	12
Table, large	12	15
Turnstile	15	12
Washbasin (sink)	9	9
<b>Locks</b>	<b>AV</b>	<b>Hits</b>
House doorknob lock	9	6
Deadbolt lock	12	9



<b>Material or Object</b>		
Magnetic lock	15	9
Padlock	12	9
<b>Machinery</b>	<b>AV</b>	<b>Hits</b>
Camera, surveillance	9	3
Copier, large	18	24
Escalator	27	24
Fax machine	6	6
Fire extinguisher	12	12
Hand cart, metal	12	6
Machinery, very light/small	9	6
Machinery, light	15	12
Machinery, medium	21	18
Machinery, heavy	27	24
Metal detector, hand-held	3	6
Metal detector, walk-thru	12	9
Monitor, video	6	9
Printer, desktop	9	6
Spacesuit	6	9
Telephone	6	6
Typewriter, electric	6	6
Typewriter, manual	6	9
VCR/DVD player	9	6
Vending machine	18	18
Water fountain, metal	9	9
X-Ray machine	18	18
<b>Outdoor Items, Miscellaneous</b>	<b>AV</b>	<b>Hits</b>
Awning	9	3
Boulder	15	29
Bridge, small (1.6 ktons)	27	21
Bridge, large (100 ktons)	27	27
Bushes	6	6
Cobblestone, single	12	12
Dirt, per cubic meter	0	30
Flagpole, breakaway	12	6
I beam, per 2m length	27	24
Manhole cover	27	15
Mannequin	9	9
Porta-potty	9	12
Railroad tracks	12	15
Stone, per cubic meter	15	57
Telephone pole	15	15
<b>Trees</b>	<b>AV</b>	<b>Hits</b>
Small tree, less than 2m	12	15
Medium tree, less than 15m	15	24

**Material or Object**

Large tree, 15m or more	15	33
<b>Walls and Fences</b>	<b>AV</b>	<b>Hits</b>
Armoured wall	39	21
Barbed wire	15	6
Brick wall	15	9
Concrete wall	18	15
Home interior wall	9	9
Home exterior wall	12	9
Office interior wall	9	9
Office cubicle wall	9	6
Reinforced concrete wall	24	15
Spaceship interior wall	24	18
Vehicle gate arm, wooden	6	6
Wire fence	18	9
Wooden wall	12	9
<b>Weapons</b>	<b>AV</b>	<b>Hits</b>
Heavy weapon	18	24-27
Pistol	12	6-12
Rifle	12	15-21
Sword	12	12-18
Very large heavy weapon	18	36
<b>Miscellaneous</b>	<b>AV</b>	<b>Hits</b>
Barrel	9	18
Control console, per 2m	12	12
Drum, 55-gallon steel	12	18
Crate, small wooden	9	6
Crate, large wooden (23m)	12	21

## The Environment and Conditions

The following section describes many of the conditions heroes could face during the course of their adventuring. Game Masters are also encouraged to extrapolate rules for conditions not described in this section by using these rules as the basis.

### ***Acid Effects***

Corrosive acids deals 1d6 points of P/L damage per turn of exposure except in the case of total immersion (such as into a vat of acid), which deals 10d6 points of Sp/L damage per turn. An attack with acid, such as from a hurled vial or a monster's spittle, counts as a turn of exposure.

The fumes from most acids are inhaled poisons.

Those who come close enough to a large body of acid to dunk a creature in it must make a HLT attribute roll (TN 15) or take 1 point of HLT as Sp/Sp damage. All such characters must make a second HLT attribute roll 1 minute later or lose another point of HLT damage.

Creatures immune to acid's caustic properties might still drown in it if they are totally immersed (see *Drowning*).

### ***Asphyxiation and Drowning***

Conscious characters can hold their breath for (10 x HLT) turns before suffering any negative effects. This number is halved for characters performing even moderately strenuous activity, such as swimming, fighting or otherwise exerting strength. After this time has elapsed, however, the character suffers stunning damage each turn.

*Mike's character has 5 HLT and 32 LIF and has fallen into a lake. Sadly, Mike's character cannot swim and sinks under water. He can hold his breath for 50 turns before suffering damage, unless he's panicking and exerting himself, in which case he can hold his breath for only 25 turns.*

The amount of stunning damage sustained depends on the character's level of activity. A passive or calm character suffers 1 point of stunning damage per turn. A character exerting himself suffers 2 points of stunning damage per turn. TGH is not subtracted from this damage.

If a character's LIF is reduced to 0 due to stunning damage, he is unconscious. If an unconscious character continues

being deprived of breathable air, he suffers 1d6 Sp/L damage per turn. Characters who lose all their LIF to lethal damage due to the lack of breathable air have suffocated or drowned. Treat death from drowning as one single Serious wound, with successful stabilization (i.e., a successful First Aid or Physician skill roll) restoring the character's LIF to one-half its previous level (prior to the "death").

## Attribute Score Loss

Some attacks and effects cause attribute score loss instead of LIF point damage. For example, poisons and diseases deal attribute score damage that is temporary and can be regained through rest or the application of the First Aid or Physician skill. In some cases, the damage is so severe that the attribute score loss is permanent, but in most cases permanent attribute loss can be avoided by medical treatment. While any loss is debilitating, losing all points in an attribute score can be devastating. (Note: the effects listed below are different than those in the *Core Rules*.)

**Strength (STR):** A STR score of 0 means that the character can't move. He lies helpless on the ground.

**Reflexes (REF):** A REF score of 0 means that the character can't move. He lies helpless on the ground.

**Health (HLT):** A HLT score of 0 means that the character is dying (treat as suffering a Fatal wound). If a character's HLT score drops, he loses 3 Life points for every point by which his HLT score drops. For example, a character fails a HLT attribute roll against a deadly poison, causing his HLT score to drop from 5 to 3. His HLT score has dropped by 2 points, so he loses 6 Life points. A minute later, the poison deals another 1 point of temporary HLT damage, dropping his score to 2. He loses another 3 Life points—for a total of 12 Life points lost because of an overall 3 point drop in his HLT attribute score.

**Intellect (INT):** An INT score of 0 means that the character can't think and is unconscious in a coma like stupor, helpless.

**Will (WIL):** A WIL score of 0 means that the character is withdrawn into a deep sleep filled with nightmares, helpless.

**Presence (PRE):** A PRE score of 0 means that the character is withdrawn into a catatonic, coma like stupor, helpless.

## Cold Dangers

Cold and exposure deal Special/Stunning (Sp/S) damage to the victim. This stun damage cannot be recovered until the character gets out of the cold and warms up again. Once a character is rendered unconscious through the accumulation of Sp/S damage, the cold and exposure begins to deal Special/Lethal (Sp/L) damage at the same rate.

An unprotected character in cold weather (below 40° F, or 5° C) must make a HLT attribute roll each hour (TN 15, + 1 per previous check) or suffer 1d6 points of Sp/S damage. A character who has the Survival skill may receive a bonus on this attribute roll and may be able to apply this bonus to other characters as well (see the skill description).

In conditions of severe cold or exposure (below 0° F, or -18° C), an unprotected character must make a HLT attribute roll once every 10 minutes (TN 15, +1 per previous check), taking 1d6 Sp/S damage on each failed roll. A character who has the Survival skill may receive a bonus on this saving throw and may be able to apply this bonus to other characters as well (see the skill description). Characters wearing winter clothing only need check once per hour for cold and exposure damage.

Frostbite or hypothermia (treat as fatigued) besets a character that takes any stunning damage from cold or exposure. These penalties end when the character recovers the stunning damage she took from the cold and exposure.

Extreme cold (below -20° F or -28° C) deals 1d6 Sp/L damage per minute. In addition, a character must make a HLT attribute roll (TN 15, +1 per previous check) or suffer 1d3 points of Sp/S damage.

Those wearing metal armour or coming into contact with very cold metal suffer cold damage. On the first turn of exposure, the metal becomes chilly and uncomfortable to touch but deals no damage. During the second and subsequent turns, icy coldness causes pain and 1d6 Sp/S damage per turn.

Any heat intense enough to damage the creature negates cold damage (and vice versa) on a point-for-point basis.

## Ice Effects

Characters walking on ice must spend 2 meters of movement to enter a hex covered by ice and the TN for REF-based skill and attribute rolls involving balance by +6. Characters in prolonged contact with ice may run the risk of taking damage from severe cold (see above).

## Darkness

The Blindsight power allows many characters and monsters to see perfectly well without any light at all, but characters with normal vision can be rendered completely blind by putting out the lights.

Torches or lanterns can be blown out by sudden gusts of subterranean wind, magical light sources can be dispelled or countered, or magical traps might create fields of impenetrable darkness.

In many cases, some characters or monsters might be able to see, while others are blinded. For purposes of the following points, a blinded creature is one who simply can't see through the surrounding darkness. Creatures blinded by darkness lose any ability to deal extra damage due to precision (for example, a sneak attack). Blinded creatures are hampered in their movement, and pay 2 meters of movement per hex moved into (double normal cost). Blinded creatures can't Sprint.

All opponents have total concealment from a blinded creature, so the blinded creature suffers a -5 penalty on all attack rolls. A blinded creature must first pinpoint the location of an opponent in order to attack the right hex; if the blinded creature launches an attack without pinpointing its foe, it attacks a random hex within its reach. For ranged attacks or spells against a foe whose location is not pinpointed, roll to determine which adjacent hex the blinded creature is facing; its attack is directed at the closest target that lies in that direction.

A blinded creature loses its REF bonus to DEF. A blinded creature takes a -1 penalty most STR and REF-based skill rolls, including any with an armour check penalty. A creature blinded by darkness automatically fails any skill roll relying on

vision. Creatures blinded by darkness cannot use gaze attacks and are immune to gaze attacks.

A creature blinded by darkness can make a hearing based Awareness roll as a free action each turn in order to locate foes (TN equal to opponents' Stealth rolls). A successful roll lets a blinded character hear an unseen creature "over there somewhere." It's almost impossible to pinpoint the location of an unseen creature. An EN of 6 or higher reveals the unseen creature's hex (but the unseen creature still has total concealment from the blinded creature).

If a blinded creature is struck by an unseen foe with a melee attack, the blinded character pinpoints the location of the creature that struck him (until the unseen creature moves, of course). The only exception is if the unseen creature has a reach greater than 2 meters (in which case the blinded character knows the location of the unseen opponent, but has not pinpointed him) or uses a ranged attack (in which case, the blinded character knows the general direction of the foe, but not his location).

A creature with scent-based Tracking skill automatically pinpoints unseen creatures within 2 meters of its location.

## Light

It's a rare mission that doesn't end up in the dark somewhere, and heroes need a way to see. See the Light Sources Table for the radius that a light source illuminates and how long it lasts.

### Light Sources Table

Item	Light	Duration
Candle	2 meters	12 hours
Torch	7 meters	2 hours
Halogen lantern	15 meters	24 hours
Flashlight	7 meters*	6 hours

*\*Creates a beam 10 meters long and 2 meters high.*

## Disease

When a character is exposed to disease, he must make an immediate HLT attribute roll. Like poisons, the TN required depends on the method of delivery (the vector) of the infection.

The victim must make this roll when he comes into contact with an infectious carrier, touches an item smeared with diseased matter, consumes food or drink tainted with a disease, or suffers damage from a contaminated attack. If he succeeds, the disease has no effect on him—his immune system fights off the infection. If he fails the roll, he suffers damage after an incubation period; once per day thereafter, he must make a successful HLT attribute roll to avoid secondary damage. Two successful HLT attribute rolls in a row indicate that he has fought off the disease and recovers, taking no more damage.

Disease	Type	Incubation	Initial Damage	Secondary
Anthrax	Inhaled/Blood	1d3 days	1 HLT	1d2 HLT*
Small pox	Inhaled/Contact	1d6+1 days	1 STR & 1 HLT	1 STR & 1 HLT
Pneumonia	Inhaled	1d3+1 days	1 STR	2 STR & 2 HLT
Hantavirus	Blood	1 day	2 STR	1 STR* & 1 HLT*
Necrotizing faciitis	Contact	1d6 days	1 HLT	2 HLT*
West Nile virus	Blood	1d3+1 days	1 REF & 1 HLT	1 REF & 2 HLT*
Salmonellosis	Ingested	1 day	1 STR & 1 REF	1 STR & 2 REF

*\*If damage is sustained, make a second saving throw to avoid 1 point being permanently drained (instead of damaged).*

### Disease Vectors

Type	TN
Ingested	24
Inhaled	21
Blood / Body Fluids	18
Contact	15

**Type:** The disease's method of delivery-ingested, inhaled, or via an injury-and the TN needed to avoid infection. A wound as small as an insect bite can transmit some injury diseases. Most diseases that are inhaled can also be ingested (and vice versa).

**Incubation Period:** The amount of time before initial damage takes effect (if the victim fails his HLT attribute roll).

**Initial Damage:** The damage the victim takes after the incubation period.

**Secondary Damage:** The amount of damage the hero takes one day after taking initial damage, if he fails a second saving throw. This damage is suffered each day the saving throw fails. Attribute score damage is temporary unless marked with an asterisk (\*), in which case the loss is a permanent drain.

## Electricity

Electrical hazards come in many forms, including stun guns, downed power lines, and electric security fences. The *Electricity Damage Table* gives damage values for various electrical hazards based on relative voltage. A character can make a HLT attribute roll to apply the character's TGH to the damage. If that Character is not grounded or is otherwise insulated from the current, the character automatically receives 2x the character's TGH to resist the damage.

### Electricity Damage Table

Type	Examples	Damage	TN
Jolt	Car battery, stun gun	1d6 Sp/L	10
Low voltage	Fuse box, electrical socket	2d6 Sp/L	15
Med. Voltage	Industrial transformer, electric fence	6d6 Sp/L	15
High voltage	Power line, electric chair, lightning	12d6 Sp/L	20

## Falling and Velocity

The amount of damage suffered from a fall depends on the falling object's velocity when it hits the ground. Damage suffered from a fall is 1d6 for every 2 meters of velocity.

Falling objects gain 10 meters of velocity per second. This is broken down on the chart as an increase of 2 meters/second for every 2 meters fallen. The maximum velocity of a falling object in the Earth's gravity is 60 meters per second. This is referred to as "terminal velocity."

Falling damage is Blunt/Lethal damage. Characters may subtract their TGH from any damage sustained before subtracting it from their LIF.

To determine the amount of damage suffered from a fall, simply find the total distance fallen on the first column of the *Falling and Velocity Table*, then read across that row to the "Random Damage" column. Alternatively, GM's may use "flat rate" damage for falls to speed things up a bit.

*Mary's character has fallen off the roof of a 6-story building. The GM determines that 6 stories is roughly equal to 24 meters. The GM consults the Falling and Velocity Table and looks at the "Distance Fallen" column until he finds "23-26." Then he reads across that row to the "Random Damage" column and sees that a 24-meter fall will inflict 9d6 of damage on Mary's character, who will hit the ground after falling for two seconds (less than a full turn). The GM picks up nine dice and suggests to Mary that she review the rules for using Action Points to avoid damage.*

A quick way to estimate damage from a fall is to determine how many seconds long the character is falling and multiply that number by 5, with a maximum of 30. This is the number of dice of damage that the character will suffer when he hits the ground.

The final column showing the game movement at those velocities is a handy reference for collisions and other speed-based damage. As a turn is 3 seconds, the velocities at m/s is simply multiplied by 3 to represent the number of meters/yards traveled, in a turn, at those speeds.

### Falling and Velocity Table

Distance fallen(m)	Velocity (m/sec)	Random Damage	Flat Rate Damage	Time (Seconds)	Notes/Examples	Velocity (m/turn)
1-2	2m/s	1d6	3	1	6-foot ladder	MOV 6
3-4	4m/s	2d6	6	"	1-story building	MOV 12
5-6	6m/s	3d6	9	"	2-story building	MOV 18
7-8	8m/s	4d6	12	"		MOV 24
9-10	10m/s	5d6	15	"	5-story building	MOV 30
11-14	12m/s	6d6	18	2		MOV 36
15-18	14m/s	7d6	21	"	Mature Oak tree	MOV 42
19-22	16m/s	8d6	24	"		MOV 48
23-26	18m/s	9d6	27	"		MOV 54
27-30	20m/s	10d6	30	"	10-story building	MOV 60
31-36	22m/s	11d6	33	3		MOV 66
37-42	24m/s	12d6	36	"		MOV 72
43-48	26m/s	13d6	39	"		MOV 78
49-54	28m/s	14d6	42	"		MOV 84
55-60	30m/s	15d6	45	"	20-story building	MOV 90
61-68	32m/s	16d6	48	4		MOV 96
69-76	34m/s	17d6	51	"		MOV 102

Distance fallen(m)	Velocity (m/sec)	Random Damage	Flat Rate Damage	Time (Seconds)	Notes/Examples	Velocity (m/turn)
77-84	36m/s	18d6	54	"		MOV 108
85-92	38m/s	19d6	57	"		MOV 114
93-100	40m/s	20d6	60	"	Statue of Liberty	MOV 120
101-110	42m/s	21d6	63	5		MOV 126
111-120	44m/s	22d6	66	"	Giant Redwood tree	MOV 132
121-130	46m/s	23d6	69	"		MOV 138
131-140	48m/s	24d6	72	"		MOV 144
141-150	50m/s	25d6	75	"		MOV 150
151-162	52m/s	26d6	78	6		MOV 156
163-174	54m/s	27d6	81	"		MOV 162
175-186	56m/s	28d6	84	"		MOV 168
187-198	58m/s	29d6	87	"		MOV 174
199-210	60m/s *	30d6	90	"	Terminal velocity.*	MOV 180 *

\* Terminal velocity (maximum velocity when falling). Increase time by 1 second for each additional 60 meters (or fraction) fallen, but do not increase damage. For objects other than falling objects (e.g., thrown objects, vehicles, etc.), add +1d6 for each additional 2m/s of velocity.

### Fatigue

The character is tired to the point of significant impairment. A fatigued character becomes exhausted by doing something else that would normally cause fatigue. An exhausted character cannot move faster than his base MOV in meters per turn (i.e., cannot Run or Sprint) and suffers an effective -2 penalty to the character's Strength and Reflexes attributes. Healing is also halved while under the effects of Exhaustion/Fatigue. After 8 hours of complete rest, affected characters are no longer fatigued.

**Exhausted:** Characters who are exhausted move at cautious pace and suffer a penalty of -4 to Strength and Reflexes. A fatigued character who does something else that would normally cause fatigue becomes exhausted. After 1 hour of complete rest, exhausted characters become fatigued.

### Gravity Differences

Heroic adventurers may occasionally journey to places where gravity is nonexistent, or perhaps many times more powerful than it is on earth. Either extreme can cause difficulties for unprepared characters.

#### Low-Gravity Areas

Low-gravity areas (such as the moon, with 1/6 earth's gravity, or Mars, with 1/3), while very comfortable for creatures used to the strain of higher gravity, may still cause problems for those unfamiliar with them. A character from a higher-gravity environment suffers a -2 circumstance penalty to all REF-related actions taken in an area of low gravity, due to his unfamiliarity with moving rapidly and maintaining balance in the low-grav zone.

A character's lift/carry capacity will be increased as appropriate to the fraction of his normal gravity he is standing in (for example, a human being in Martian gravity could lift and carry three times the weight he could on earth).

Similarly, a character's jumping distance will be increased in an area of low gravity, and he will be able to ignore a greater number of feet fallen:

Gravity	Jump Modifiers
1/2	×2, ignore first 6 meters (20 feet)
1/3	×3, ignore first 8 meters (25 feet)
1/4	×4, ignore first 10 meters (30 feet)
1/6	×6, ignore first 15 meters (45 feet)

In an area of low gravity, all falls deal half damage.  
All thrown or projected weapons add half again its ranger in an area of low gravity.

#### High-Gravity Areas

High-gravity areas are rather inhospitable for creatures from low-gravity areas. Not only does a character's weight increase in a high-gravity area (counting against his lift/carry capacity and slowing him down), a high-enough gravity field may cause rapid injury, unconsciousness, or death to a creature unprotected against its full effects.

Generally speaking, humans and similar creatures may function adequately for some time under 2-4 times their usual gravitational load when cushioned by special chairs or fluid tanks, though leaving these cushions can be dangerous. They may also remain conscious and functional for very brief periods under 5-10 times their usual "G load," but only while cushioned and with an increasing chance of unconsciousness regardless.

A character suffers a -2 penalty to Jump checks for every multiple of his ordinary gravity (for example, a human in an



area of 3 Gs suffers a -6 penalty to Jump checks).

A character exposed to a high enough level of gravity will be forced to make a Health Attribute Save (TN listed below) for each round of exposure, or immediately pass out. This unconsciousness will persist as long as the character remains in the area of increased gravity.

Gravities	Special Effects
2	×2 B/S for falling damage and distance
3	×3 B/S for falling damage and distance
4	×4 B/S for falling damage and distance
5-6	×5 B/S for falling damage and distance
7-8	Health Attribute TN 15 vs. unconsciousness
9-10	Health Attribute TN 18 vs. unconsciousness, 1d6 B/S damage per turn, ×10 falling damage
11-12	Health Attribute TN 24 vs. unconsciousness, 2d6 B/S damage per turn
13-14	Health Attribute TN 27 vs. unconsciousness, 3d6 B/S damage per turn
15+	Health Attribute TN 30 vs. unconsciousness, 4d6 B/S damage per turn, ×20 falling damage

Projectile weapons will have their range increments cut in half in areas of 2 or more gravities.

## Heat Dangers

Heat deals non-lethal damage that cannot be recovered until the character gets cooled off (reaches shade, survives until nightfall, gets doused in water, is targeted by *endure elements*, and so forth). Once rendered unconscious through the accumulation of non-lethal damage, the character begins to take lethal damage at the same rate.

A character in very hot conditions (above 90° F, or 32° C) must make a HLT attribute roll each hour (TN 12, +1 for each previous check) or take 1d6 points of Sp/S damage. Characters wearing heavy clothing or armour of any sort take a -3 penalty on their rolls. A character with the Survival skill may receive a bonus on this attribute roll equal to one-half his Survival skill score (round down) and may be able to apply this bonus to other characters as well. Characters reduced to unconsciousness begin taking lethal damage (1d6 Sp/L per hour).

In severe heat (above 110° F, or 43° C), a character must make a HLT attribute roll once every 30 minutes (TN 12, +1 for each previous check) or take 1d6 points of Sp/S damage. Characters wearing heavy clothing or armour of any sort take a -3 penalty on their rolls. A character with the Survival skill may receive a bonus on this attribute roll equal to one-half his Survival skill score (round down) and may be able to apply this bonus to other characters as well. Characters reduced to unconsciousness begin taking lethal damage (1d6 points per each 30-minute period).

A character that takes any stunning damage from heat exposure now suffers from heatstroke and is fatigued.

These penalties end when the character recovers the stunning damage she took from the heat.

Extreme heat (air temperature over 140° F or 60° C, fire, boiling water, lava) deals P/L damage. Breathing air in these temperatures deals 1d6 points of damage per minute (no attribute roll to prevent this). In addition, a character must make a HLT attribute roll every 5 minutes (TN 12, +1 per previous check) or take 2 points of Sp/S damage. Those wearing heavy clothing or any sort of armour take a -3 penalty on their rolls. In addition, those wearing metal armour or coming into contact with very hot metal are affected as if caught in a forest fire (see *Forest Fires*, above).

Boiling water deals 1d6 points of scalding P/S damage, unless the character is fully immersed, in which case it deals 5d6 points of P/S damage per turn of exposure.

## Smoke Effects

A character that breathes heavy smoke must make a HLT attribute roll each turn (TN 15, +1 per previous check) or spend that turn choking and coughing. A character that chokes for 2 consecutive turns takes 1d6 points of Sp/S damage.

Smoke obscures vision, giving concealment to characters within it.

## Investigation Montages

Investigation montages are designed for when a group wants to play investigations as more than a single roll but with less than a full scene given over to every aspect of the inquiry. In essence the montage is a scene filled with quick glimpses of action in which the PCs collect information and do footwork. The technique is used in movies and comics, showing the hero speaking to a variety of sources, hanging informants from their heels, and then quickly moving on until at the end of the sequence the hero reveals all the information they have learned. Montages work well in cases where PCs want to strut their skills, or to be able to find out information they might not be able to with a simple roll, or even when they roll badly when trying to find a critical bit of information.

Running an investigation montage starts with the GM deciding what the core skill for the investigation will be. In many cases this will be Gather Information, but it could also be a Science for forensic investigations, or a Knowledge for academic investigations. The PCs then check against that skill. (Other skills can be used for the base roll if the GM wants. They get a modifier equal to the level of extra difficulty the GM thinks using the skill would incur. In general a close skill will give a +2 to all result levels, while a skill that is only tangentially relevant might be a +6 or more.) If they get all the information in a single roll then they don't need to do a montage — as the character already has access to all the information through their super-human coolness. (PCs or GMs could still have a very brief description of how the PC gathers the information in montage style, it just doesn't follow the rest of the rules for montages, as the PC already has everything they need to know.) If the PC gets a failure of more than 6 under the TN then not only don't they have the information, they don't even know enough to figure out where to start and can't do a montage. It's when the PC gets a partial success or minor failure that the montage comes into play, letting them

learn more quickly.

In the montage sequence the PCs make checks with skills related to the primary investigation skill in order to improve their initial investigation check result. Each related skill check the PC makes gives them a +2 bonus to the result of their initial check, and possibly access to new information. (This system is the reason all investigation tables in Church and State work with 2 point differences in TNs, each successful related roll will get the PCs some level of new information.) GMs who feel adventurous could have badly failed rolls result in wrong information or red herrings, but this should only be done when the GM is sure it will make the adventure more fun rather than more frustrating.

The GM then works with the players to create a brief scene of the PCs using the skills to get the information. A character who makes a Computers roll, for example, might be seen hanging upside down from a rope harness while hacking into the CIA mainframe before escaping with a disk. How long or detailed the scene is depends on the needs of the story and what feels right to everyone involved. A Computers roll might just be the shot above if the information is interesting but not vital, or it could involve a full scene of sneaking in, tricking the guards, moving through the ventilation, and then swinging down to access the computer. All of it, however, is covered by the one roll, as the point is to let the character be superhuman cool and to move the plot by gaining information — not to make a whole new scene that everyone else has to sit through.

Each related skill can only be rolled against once (no retries — these aren't full skill rolls, they are bonus rolls), and no more than five related skills can be rolled against. What skills are considered related is up to the GM, but the following skills are generally good for any investigation montage.

**Bluff:** In any situation in which someone can be tricked into revealing more information than they want to give away, Bluff can be a related skill. If no one knows the information (such as it only being found on lost scrolls of Atlantis) it cannot be bluffed out of them. TN for Bluff checks as part of a montage should be between 15 and 25.

**Computers:** In the information age large amounts of data can be found on computers, either by going online or hacking into a secure computer. The only limitation here is that the information must have been entered into a computer. Something known only to illiterate morlocks, for example, won't be in a database. TNs for Computers checks should be between 10 (for going online and using Searches) to 25 (for breaking into a secure computer).

**Diplomacy:** The fine art of making friends and making them tell you things is always a good idea for investigators. Diplomacy is an especially fine choice when working with cops, lawyers, or powerful individuals who might object (with weapons) to being bluffed or intimidated. It's also ideal for talking to people who may have been witnesses and getting reluctant folks to tell you things. TN for Diplomacy checks is normally between 12 and 18.

**Disguise:** Disguise works much as Bluff does, getting people to tell you things they shouldn't. It works just like Bluff, but looks different when you describe the results.

**Gather Information:** When this isn't the primary skill it can almost always be a related skill, because it is entirely based on knowing how to find information. TNs will generally be around 15.

**Innuendo:** This skill works best when there is someone that wants to give you information, but is afraid to. Giving them a way to tell you without telling you may just be the key to getting them to open up. TNs are around 18.

**Intimidate:** Scaring, or beating, the snot out of people is one of the oldest methods of gaining information known to humankind. The only limit on Intimidation is that you can't intimidate some people without consequences, and people with high Will saves may be immune. TNs will generally be between 15 and 21.

**Knowledge:** Any knowledge that is tightly related to the investigation in question (like City knowledge for finding a hidden base, or Occult knowledge for finding a sorcerer's weakness) can be a related skill. Area Knowledges are often appropriate, as they can be used to figure out who the important folks to talk to are, as well as whom likely witnesses would be. Not every knowledge works for everything and only one knowledge can be used per montage, no matter how many may be relevant. TNs are around 18.

**Read Lips:** A great skill for finding things out from just about anyone, because all you have to do is be able to see them. Of course, if no one is talking about the information you need, you can't use this skill to get it. TN is usually 15.

**Science:** Works exactly the way knowledge does. Forensic sciences are often of use in murder cases, psychology sciences are wonderful for building profiles, and sciences like chemistry, metallurgy, and geology are often good for tracking people through fibers, dirt, or metal shavings left on their clothes or in their tracks. TN is usually 18.

**Sense Motive:** The best skill for getting information people don't even know they're giving you, this one can be used for everything from reading body language to seeing through lies and understanding complex social relationships. As with the other social skills it can't give you information no living person, or person you can get close to, has to give. TN is usually 15 to 18.

**Search:** Sometimes the ability to comb over a scene for details others have missed is what separates the Holmes from the Watsons. Unfortunately finding things you missed the first time can be difficult, and TNs tend to be up around 18 to 21.

**Powers:** There are many ways that powers can be used as related skills, and many of them might not even need a roll. GMs should be flexible in their arbitration, as it is powers that make player characters what they are. Powers such as Telepathy, Prognostication or Prognostication, Compu-link, ESP, and super-skills are almost always appropriate.

If PCs have a good justification other skills can be used as related skills, GMs just need to be sure that what is being done makes sense in the situation. If the PC can think of a cool and heroic way to use a skill or power then they should be allowed to do it. Someone using Move Silently to sneak into a secure location and overhear a conversation, for example, could work — even though Move Silently isn't normally an information gathering skill.

GMs can also use a montage to lead players to a specific scene as the culmination of the montage. When the PCs have gotten as much information as they can from the montage or the general roll the montage comes to an end with the start of a scene in which the PCs face the person holding the final clue or key to the information they have collected. Thus the montage can be a tool to get the players where they need to be with the information they need to

have. This should be used to help players who get stuck, not to railroad them into making decisions. GMs can help them get the information, but what they do with it must remain up to them.

***Example:** The PCs are trying to track down the Bone Dealer's headquarters. The PCs roll a 21 on their Deduction Skill. The PCs don't find the information to be enough, so they start an investigation montage. One PC uses his Negotiation(Diplomacy) to work with a cop who is also investigation the case. The PC makes his Negotiation(Diplomacy) check and the GM describes him smooth-talking the cop into letting him see his notes. He adds 2 to the initial roll, making the total result a 23 and learning that the suspects have cars parked in a garage on 19th street. Another PC uses Persuasion(Intimidation), and describes his character hanging a mob snitch out a window by his feet until the man starts to babble. He tries a Persuasion (Intimidation) check, but fails it, and learns nothing new as the GM tells him he just makes the poor snitch faint. The first PC then uses Persuasion(Fast Talk), describing his character tricking a morlock into helping him, and makes his "Bluff" check. This brings the total to a 25, and gives the PCs the location of the headquarters. At that point the PCs stop, not knowing they could find out more information.*

## Minions, Flunkies and Passers-by

To circumvent unnecessary dice rolling and campaign design time, the NPCs whom are not pivotal to a game can be simplified yet be completely compatible with the core rules. The following abridged creation rules allow for characters to be whipped up in quick time.

### Attributes

Attribute scores are numbers that show how good your Minion is in that area. Attribute scores are rated from 1 to 10.

*Minions* has two Core Attributes and four Derived Attributes.

The two Core Attributes are:

**Body:** How strong, healthy and agile your Minion is.

**Mind:** How smart, determined and charismatic your Minion is.

The four Derived Attributes (and their abbreviations) are:

**Life (LIF):** How hard your Minion is to kill or knock out. Your Minion's Life score equals  $(3 \times \text{Body}) + (2 \times \text{Mind})$ .

**Movement (MOV):** How far your Minion moves in one turn. Your Minion's Movement score equals  $2 \times \text{Body}$ .

**Defense (DEF):** How tough it is for someone to hit your Minion. Your Minion's Defense equals  $\text{Body} + 10$ . In a fight, characters can also add their Combat Skill score to their Defense, if appropriate (GM's choice).

**Toughness (TGH):** Your Minion's Toughness is equal to  $(\text{Body} + \text{Mind})$  divided by 2, rounding up. Toughness is subtracted from damage caused by blunt and non-lethal attacks. (Toughness does not protect a Minion from piercing and lethal attacks.)

### Skills

Skills are things your Minion has learned how to do. Each skill has a number that indicates how much your Minion knows about that skill. Each skill is used with an attribute (either the Body or Mind attribute) to figure out if your Minion succeeds at a task. The attribute most commonly used is listed with the skill. (The GM may decide to use the other attribute in some cases.)

There are ten basic types of skills in *Instant Action!*. This is an intentionally simple list of very broad skills. GMs may create additional skills for specific subjects if they want more variety. For example, a GM could replace the *Combat Skill* with the skills *Unarmed Combat*, *Firearms* and *Swords*.

**Arts & Crafts:** How good your Minion is at various arts and craft, such as painting, cooking, carpentry or even photography. (Mind for "thinking" tasks, Body for tasks involving dexterity or agility)

**Athletics:** Anything involving physical or athletic activities, including climbing, swimming, and acrobatics. (Body)

**Combat:** How good your Minion is at fighting with bare hands, melee weapons, such as clubs or swords, missile weapons, such as crossbows or pistols, or supernatural powers, such as laser eye beams or photon blasts. (Body)

**Covert:** How good your Minion is at not being noticed and getting into secure places. (Body)

**Focus:** Anything involving concentration, observation or perception, or the use of psionic powers, such as telepathy or mind control powers. (Mind)

**Education:** The Minion's general education and knowledge of general education subjects, such as history, religion, basic science, or languages. (Mind)

**Nature/Outdoors:** How good your Minion is at things like camping, fishing, hunting, survival, navigation and horseback riding. (Mind for "thinking" tasks, such as survival and navigation, Body for "physical" tasks, such as hunting and horseback riding.)

**Science:** The Minion's advanced knowledge of sciences, such as biology, medicine, math or physics. (Mind)

**Social:** Anything involving using your charm or persuasion (Mind).

**Technical:** How good your Minion is at technical tasks such as mechanics, electronics, computer programming and piloting a fighter jet or starship. (Mind for "thinking" tasks, Body for tasks involving dexterity or agility.)

### Using Skills

When your Minion attempts an action that involves a skill, you roll dice to see if the Minion succeeds or not. When you roll the dice, you add the Minion's **Attribute + Skill + 3 dice**. The total is compared to a Target Number (or TN), that is determined by the GM. If the total equals or is higher than the Target Number, your Minion has succeeded at the task.

### Minion Combat

When the Minions get into a fight, the game "slows down" and is played in Turns. Each Turn represents 3 seconds in "game time." Each Minion can attempt one Action in each Turn. After each character (including both Minions and bad guys) has acted, the Turn ends and a new Turn begins.

At the beginning of each Turn, all players roll 1 die and add the number rolled to their character's Body attribute (the GM rolls for any non-player characters, such as bad guys or "extras" in the scene who are involved in the fight). The

character with the highest “initiative” total goes first. If two characters have the same initiative total that Turn, then the character with the highest Body attribute goes first. If they are still tied, the characters act at the same time.

## Doing Damage

If the Minion is using their strength (Body attribute) to attack, then roll a number of dice equal to  $\frac{1}{2}$  the Body attribute score (any fractions become +2; e.g., a Minion with a Body of 5 would roll 2d6+2 for damage when punching).

The total rolled on the dice is the amount of damage caused by the attack.

## Taking Damage

When a Minion is hit by an attack, they can subtract their Toughness from the points of damage from blunt or non-lethal attacks (but not from piercing or lethal attacks). Any left over damage points are subtracted from the Minion’s Life points.

When a Minion has no Life points left, the Minion is knocked out or dead (the GM decides, depending on the type of attacks that caused the damage or other circumstances).

## Knockback

When your Minion gets hit, he or she may get knocked back. If the total damage rolled for a successful attack (before subtracting any points for Toughness or Armour) is greater than the Minion’s Body + Toughness, the Minion is knocked back 1 meter or knocked down in the same spot (GM’s choice based on the circumstance). For every 5 points of damage beyond the character’s Body + TGH, the character is knocked back 1 extra meter.

## Recovering Lost Life Points

Characters can recover lost Life points at the end of a fight. Any Life points lost because of “stunning” (i.e., blunt and non-lethal attacks, such as from punches) are fully recovered after the end of the fight. Life points lost from lethal attacks (such as gunshots, stab wounds or laser blasts) are recovered at a rate equal to the character’s Body attribute score per day.

For a more cinematic feel to a game, the GM may allow characters to recover lost Life points from non-lethal injuries during a fight. Characters recover a number up Life points equal to 2 x their Body attribute score at the end of every fourth Turn.

## Poison and Drugs

Only too often in comic books, our heroes are subjected to the effects of interrogation drugs, or kidnapped after succumbing to something they ate or drank. The three listings below describe real-world substances that can be used for such purposes. Poisons are described by their *Mode* of delivery, *Speed (Spd)*, *Damage Rating (DR)*, and *Duration (Dur)*.

### Mode

The mode is the manner in which a poison or drug is introduced to the victim. Whenever a poison is introduced to a person, the victim must make a HLT attribute roll using a target number based on the substance’s mode (the TN for each mode is listed in parenthesis). This roll is made immediately upon successful introduction of the poison. If the roll is successful, then the poison’s effects are halved. A failed roll means the poison is at full effect. This roll is made for poisons and drugs alike, including beneficial drugs; some substances just don’t “take.”

**Topical (TN 15):** Topical poisons and drugs are introduced by contact with the victim’s skin. They usually take the form of a cream or ointment. The poison is then absorbed into the victim’s skin. Topical poisons are near useless in combat. Topical poisons can be mixed with makeup, perfume and even medicinal herbs. Topical poisons are generally the slowest type of poison.

**Ingested (TN 24):** Ingested poisons must be eaten or drunk. They usually are in powder or liquid form. Ingested substances are usually mixed with food or drink, but may be introduced directly to the victim’s mouth via water dropper, spit, blowpipe or any of a number of ingenious means. Ingested drugs and poisons are generally slow, though faster acting than topical ointments as a rule.

**Inhaled (TN 21):** Inhaled poisons and drugs must be introduced to the lungs of the victim. This can be accomplished by use of a powder, vapors or smoke. Inhaled substances are generally faster acting than ingested ones, though not as fast as those introduced directly to the bloodstream.

**Blood (TN 18):** Blood poisons and drugs must be introduced directly to the victim’s bloodstream, through a cut or abrasion. Blood poisons may be put on a blade or needle, but such applications are only effective for one strike and the strike must penetrate any Armour and deliver penetrating damage to the victim. Whether or not the strike delivers the poison, the dose of poison is “used up.” Blood poisons are the fastest type of poison, as a rule.

### Speed of Poisons and Drugs

Speed (abbreviated “Spd”) measures how often the poison or drug’s effects are applied. When a poison is introduced, it first takes affect as soon as an amount of time has passed, based on the poison’s Speed. The poison’s effect occurs again after each passing of this time.

*A poison with a Speed rating of 10 minutes is introduced to a victim. After 10 minutes the victim will suffer the effects of the poison, and again after another 10 minutes have passed, and so on.*

As a general rule of thumb, ingested poisons are faster than topical poisons, inhaled poisons are faster than ingested ones, and blood poisons are faster than inhaled poisons.

### Effect

The Effect (abbreviated “Eff”) represents the amount of damage or other effect caused by the substance. The effect is rolled once each time period (based on the Spd of the substance) for each dose that affects the victim. Being exposed to two doses of a substance doubles the Effect of that substance. All dice rolls for Effect are cumulative.

For harmful substances, this damage may be subtracted from a character's LIF or from an attribute, depending on the type of poison. A drug or poison need not be fatal; knock-out drugs also work by accumulation, with "damage" subtracted from different point pools depending on the type of effect. The DR aspect of a poison changes depending on the type of attribute being attacked. DR deducted directly for Core Attributes and DR x 1d6 for derived attributes.

*For example, a sleeping drug rated at DR3 will cause 3d6 of stunning damage. Once the victim's LIF reaches zero, they are asleep. However if a mental poison was administered causing direct damage to a character's INT attribute then the damage is 3 points per Spd for the Duration.*

Beneficial and medicinal drugs work by adding to an attribute and/or LIF depending on the effect desired.

For example, a stimulant rated at DR2 will add 2 to REF and 2d6 to LIF.

## Duration of Poisons and Drugs

Duration (abbreviated "Dur") is the total amount of time that a poison can affect someone after it is introduced to the victim. The effect is applied to the victim (or patient, as the case may be) once each time period listed based on the drug or toxin's Spd, until the poison has either dissipated or "run its course," or (in extreme cases) until the affected person dies.

*Chin-doku has Eff 2d6, a Spd rating of one minute and a Duration of 10 minutes. This means that the poison will cause 2d6 of effect every minute, for 10 consecutive minutes.*

## Chloral Hydrate

One of the oldest hypnotic (sleep-inducing) depressants known, chloral hydrate is a component of the infamous "Mickey Finn," often combined with alcohol for the purpose of kidnapping or waylaying the hapless drinker.

**Health Attribute Save TN:** 24

**Mode:** Ingestion, **Effect:** Unconsciousness, DR 4 against LIF, **SPD:** 5 minutes, **Dur:** 1d6 hours

## Chloroform

Chloroform is a colorless liquid with a sweet burning taste and a distinctive pleasant odor. Once widely used as an anesthetic, it has fallen into disuse due to the development of more precise and less damaging general anesthetics. Poured onto a cloth and applied to the face of a victim (generally requiring a successful grapple check), it still has some utility for costumed villains and mad scientists.

**Health Attribute Save TN:** 21

**Mode:** Inhalation, **Effect:** Unconsciousness, DR 2 against LIF, **SPD:** 2 minutes, **Dur:** 1 hour

## Scopolamine/Sodium Amytal

These two barbituates, both with legitimate medical uses, have long suffered (or perhaps enjoyed) a certain notoriety due to their use as "truth serums" in genuine interrogations and urban legends alike.

No drug alone can make a person tell the truth. However, a subject carefully reduced to an uninhibited or hypnotic state by the administration of barbituates may become complacent or confused and reveal far more under interrogation than he would otherwise.

*A character successfully affected by a barbituate but not yet unconscious (if he suffers a secondary effect, there is a separate 3 in 6 chance that he will fall unconscious) may be interrogated with a +4 circumstance bonus to his questioner's Interrogation skill rolls.*

**Health Attribute Save TN:** 18

**Mode:** Injection, **Primary Effect:** Willpower reduction, DR 2, **Secondary Effect:** Reflex reduction, DR 1, **SPD:** 1 hour, **Dur:** 1d6 hours

## Treating Poison Victims

Characters suffering the effects of any poison may not heal, nor recover any lost LIF or attribute points, until the poison has run its course. They may recover LIF lost to stunning damage, unless the poison itself causes stunning damage, in which case the character doesn't recover any LIF points at all.

Once the poison has exceeded its duration, the character may begin to heal normally. Characters recover LIF and primary attribute points per the *Recovery Rules*.

*Torando was bitten by a sea snake and failed his HLT roll. Torando suffers 18 points of Sp/L damage and loses 3 points from REF. Luckily, Torando was quickly treated by a physician and survived the bite. Torando has a HLT of 7, and begins the healing process. Torando is in a Cinematic level campaign, so the recovery period is one day for lethal damage and one week for attribute points. Torando will recover 7 LIF per day and 1 point of REF per week.*

Characters making a successful Physician (TN 21), First Aid or Herbalist (TN 18) skill roll can determine that a person has been poisoned. If the person treating the victim makes a second successful roll at -3, they will know which specific poison was used and how to counter it.

To stop a poison's progress, the victim must be given one dose of healing herbs or medicine, as prescribed by the attending doctor. This dose will immediately halt the progress of the poison; the person will suffer no additional damage. Any damage already suffered remains, but it may be healed normally, as the victim will begin the healing (i.e., Recovery) process.

## Making Poisons

Characters with the appropriate skills can concoct healing and medicinal drugs.

To create a poison the character must first obtain one unit of the necessary raw materials. The materials and their weight will vary depending on the type of poison, but GMs can assume a basic weight of .1 kg of raw materials is needed to create one dose of poison. Some raw materials may be purchased in a market, while others will require the character to

go to some effort to locate them. This could involve a trek into the mountains (possibly requiring a local guide), a quest or some other circumstances which can serve as the basis of an adventure itself.

Once the material components are gathered, the character must spend time preparing the materials, extracting the toxins and creating the final lethal product. The time it takes for this process is up to the GM, but should be no less than 1 hour for each dose of poison being created.

The final step is for the character to make a skill roll, with a target number determined by the GM, based on the skill being used. Recommended skills and target numbers are given below. Not all skills will be available in all settings.

Skill	TN	Setting
First Aid	18	Primitive
Herbalism	15	Fantasy/primitive
Chemistry	15	Fantasy/Primitive
Chemistry	18	Modern
Chemistry	15	Sci-fi
Pharmacology	12	Modern/sci-fi
Physician	21	Fantasy/primitive
Physician	18	Modern

Success means that one dose of the desired poison is created. A critical success provides two doses or increases the Speed by one step up the time table (player's choice). A failed roll indicates that some mistake was made during the creation process, rendering the poison ineffective. A failure with an EN of -6 or more indicates the character has poisoned himself.

## Radiation

There are three main types of ionizing radiation; Alpha, Beta and Gamma particles. They may be found in sources of man-made radiation as well as natural radiation sources. Radiation Poisoning is described by their *Mode* of delivery, *Speed (Spd)*, *Effect (Eff)*, and *Duration (Dur)*. See the Poisons rules for explanations of Effect and Duration as the concept is identical.

### Mode

Alpha (TN 15)	Alpha particles can be shielded by a sheet of paper or by human skin. However, if radionuclides that emit alpha particles are inhaled, ingested, or enter your body through a cut in your skin, they can be very harmful.
Beta (TN 18)	Beta particles cannot be stopped by a sheet of paper. Some beta particles can be stopped by human skin, but some need a thicker shield (like wood) to stop them. Just like alpha particles, beta particles can also cause serious damage to your health if they enter your body. For example, if ingested, some radionuclides that emit beta particles might be absorbed into your bones and cause damage.
Gamma (TN 21)	Gamma rays are the most penetrating of the three types of radiation listed here. Gamma rays usually accompany beta, and some alpha rays. Gamma rays will penetrate paper, skin, wood, and other substances. To protect yourself from gamma rays, you need a shield at least as thick as a concrete wall. This type of radiation causes severe damage to your internal organs. (X-rays fall into this category, but they are less penetrating than gamma rays.)

### Radiation Table

Speed (abbreviated "Spd") measures how often the radiation's effects are applied. When radiation is introduced, it first takes affect as soon as an amount of time has passed, based on the radiation level's Speed. The effect occurs again after each passing of this time. The Duration column shows how often the effect is applied to the character and also how quickly passive "Rad-Tags" will notify the wearer the radiation levels. Active sensors will give an immediate reading.

Level	Type	Spd	Eff	Dur	Example Effects
0	No radiation	none	none	none	
1	Low Radiation	none	DR1	1 Day	Nausea, fatigue
2	Medium Radiation	1/day	DR2	1 hour	Vomiting
3	High Radiation	1/hour	DR3	1 minute	Diarrhea, hemorrhage
4	Extreme Radiation	1/minute	DR4	1 Turn	Internal bleeding
5	Lethal Radiation	1/Turn	DR5	1 Turn	Damage to nervous system



Protection

Radiation suits shift the category of radiation down one level for environmental radiation and provide a +2 bonus to HLT checks. Better quality suits can reduce double, or even triple, categories of radiation levels and provide +4 and +6 respectively to the HLT attribute check. Surface Radiation can be washed from a character and their gear. The trouble starts when the irradiated particles are ingested or absorbed.

Seers and Scrying

Prognosticative abilities require some careful handling on the part of the Gamemaster, since their unrestrained use can often ruin the fun of an adventure by allowing heroes to immediately know everything they need to about a particular mystery or event. Need to know who the murderer is? Just use Prognostication. Need to know where the villain will strike next? Just look into the future. This is one of the reasons why the GM is encouraged to make checks for these powers secretly. That way the GM can control what information gets handed out to the players. Still, characters with a lot of levels in either power are generally going to get high results on their checks. GMs may want to limit these powers (perhaps requiring the Uncontrolled problem) or even disallowing them in their own campaigns.

Starvation and Thirst

Characters might find themselves without food or water and with no means to obtain them. In normal climates, Medium-size characters need at least a gallon of fluids and about a pound of decent food per day to avoid starvation. (Small characters need half as much.) In very hot climates, characters need two or three times as much water to avoid dehydration.

A character can go without water for 1 day plus a number of hours equal to 2 times his HLT score. After this time, the character must make a HLT attribute roll each hour (TN 10, +1 for each previous check) or take 1d6 points of Sp/S damage.

A character can go without food for 3 days, in growing discomfort. After this time, the character must make a HLT attribute roll each day (TN 10, +1 for each previous check) or take 1d6 points of Sp/S damage.

Characters who have taken stunning damage from lack of food or water are fatigued. Stunning damage from thirst or starvation cannot be recovered until the character gets food or water, as needed—not even magic that restores LIF points heals this damage.

The Elements

Exposure to the elements can inflict damage on an unprotected character, and prolonged exposure can kill a character.

To determine how much damage an element inflicts, determine its severity, then consult the table below.

All damaging elements can use the same table, as it abstract in nature. The effects of harsh elements is the same, in game terms; only the special effect differs.

Element Damage Table

Severity	Damage	Examples
Mild	1d6 per day	Stranded in desert
Moderate	1d6 per hour	Sandstorm, blizzard
Strong	1d6 per minute	Extreme cold
Severe	1d6 per turn	Fire, mild radiation
Extreme	1d6 per second	Strong radiation

MechASsemble! Rules

Mecha Design

What is a Mecha?

"Mecha" is the term used by Japanese animators and fans to refer to the mechanical designs that appear in Japanese animation, or anime. Mecha can be a giant robot, a suit of powered armour, or a vehicle of some other sort, such as a spaceship, tank, submarine, or motorcycle.

In the west, "mecha" is sometimes used in the Japanese sense, and sometimes to refer to piloted robots.

MechASsemble provides a means of describing all manner of mecha in game terms, and offers simple, playable systems for using them in adventures. Although its primary focus is on anime-style giant robots and powered armour, MechASsemble can be used to create everything from sports cars to sky galleons.

This chapter provides rules for creating mecha of all sorts, from oared galleys and Gnomish war machines to cars, main battle tanks, aeroplanes, submarines, powered armour ... and giant robots.

MechASsemble is an effects-based system. Start with a general concept for a giant robot, suit, monster or vehicle, and use these rules to translate it into game mechanics. The system is concerned with what a mecha does, not the nuts-and-bolts details of what technology is or isn't available in a particular setting. That is up to the GM.

There is no need to keep track of weight, money, power, volume, or other considerations of that nature. Instead, an abstract "Mecha Point" game mechanic rates relative capability of the mecha design.

## Science vs. Magic, Reality vs. Fantasy

Although some of the text that follows for the mecha creation rules uses modern, scientific terminology, players and GMs should not feel constrained by this. The rules herein are intended to allow total freedom in mecha creation, be it ultra-realistic military vehicles, sea galleons from the age of piracy, super-science starships of epic space opera, or magical mecha in a fantasy setting. The most important thing one should keep in mind while looking at the mecha creation rules are the rules themselves. If one wants to have Explosive Reactive Armour on his or her sea galleon, the player should not feel restricted against doing so by the fact that such high-tech armour did not exist in the age of pirates. The Explosive Reactive Armour could represent additional layers of armour on the ship's hull, which provides protection against attacks in a similar game mechanical fashion as the E.R.A rules despite the fact that the real-world effect is different. Never let the text constrain your imagination.

In MechASsemble, a "mecha" is any vehicle, suit, construct, or giant robot built with Mecha Points.

The word mecha is both singular and plural, just like "samurai" or "ninja."

## Design Cost

Mecha design is a multi-step process, much like character creation. It is up to the GM whether players can design their own mecha or whether they must select them from existing designs.

If the GM allows players to design their own mecha, he or she should specify how many Mecha Points are available or if the pilots need to pay points for the new 'Own a Big Mecha' Character advantage (see the ASsembler Core Rules). The GM may decide that only Mecha Pilots and Mecha Commanders can own mecha. Additionally, the GM must indicate whether any particular traits are required or forbidden, or if the mecha must follow a particular theme. For example, "each character must have a personal medium-size mecha suit" or "all mecha must be submarines" or "everyone should have a Very Large or Gargantuan giant robot that can travel in space." The GM may ask players to revise their mecha designs to fit the game setting.

Design a mecha by selecting various characteristics, such as HITs, Armour, occupancy, or special traits or weapons. Each has a Mecha Point cost; sometimes this is positive, sometimes negative.

Add all the costs together to find the Total Mecha Point Cost. This is the number of Mecha Points that it costs to start with this mecha, or the total used in any Mecha Point Equivalence formula. There is no cost for a mecha's Type or Size, since the advantages and disadvantages tend to balance.

## Mecha Points

Each mecha design will cost a certain number of Mecha Points depending on its statistics and qualities. Mecha Points are an abstract representation of the qualitative value of the mecha. A character gains a number of Mecha Points depending on his or her access to resources as well as the character's importance in organisations.

The exotic capabilities of the mecha are outlined in their respective Level progression chart. The more points spend in Levels the higher the mecha's capability. The exact details regarding the mecha's configuration, function, storage, and design are up to the player. The GM has final approval over all mecha modifications.

### Mecha Campaign Levels

**Low-powered Street/Soldier Level — 200 Mecha Points:** This will buy the kind of vehicles and mecha one would expect in a game about street-level operatives, like bounty hunters or gangsters. A bulletproof hotrod, for example. It is also suitable for a team of modern soldiers. Thus, a crew of four player-characters could pool their Mecha Points and buy an M1 Abrams tank.

**Average-powered Agent Level — 400 Mecha Points:** This will buy the kind of gear that super agents or cyberpunk anime heroes have. Personal powered suits, for example, or a "do anything" spy car.

**High-powered Mecha Troopers Level — 800 Mecha Points:** This will buy a one-man mecha roughly as powerful as a modern-day battle tank or jet fighter. A group of characters who pool their Mecha Points could buy a small fighting ship or space cruiser. Many giant robot anime shows have mecha at this power level.

**Very high-powered Super Mecha Level — 1,200 to 1,600 Mecha Points:** This will buy a mecha that is far beyond any modern day fighting machine. This is the standard power level for mecha in giant robot shows where the heroes' mecha are far tougher than the typical "grunt" mecha (usually built on 800 Points) they face.

**Cosmic-powered Guardians Level — 2,000 to 2,400 Mecha Points:** This will buy a mecha that is potentially world-shaking in its power. Campaigns similar to anime series where the characters are a small group of teenagers who are the only beings preventing the destruction of Earth will often start with mecha at that this level.

## Mecha Points in the Campaign

Each Level of the Own a Big Mecha Character advantage gives Mecha Points with which to build a mecha. Characters can pool their Mecha Points to create larger mecha, but should not usually be allowed to combine Mecha Points with non-player characters.

Each "major" item of Personal Gear in MechASsemble can be used to add additional Mecha Points to an existing mecha (through custom upgrades, etc.) or build a mecha of intermediate value.

The GM may vary the threshold to better balance mecha against other elements of the game.

### Mecha Points as Dollars/Euros

An approximate dollar value in modern US or EU dollars can be found using this conversion:

Dollar Value = Mecha Points × Mecha Points × \$2

Also, multiply the cost by 1 to 5 if the mecha was built for a government agency or the military, by 5 if it can travel in space or underwater, and by 10 if it is a custom-built machine or experimental prototype. All increases are cumulative; a mecha built for the military (×2 cost), that flies in space, and is a prototype, is  $2 \times 5 \times 10 = 100 \times$  cost.

### **Mecha Points as Interstellar Credits**

In some science fiction settings, the cost in credits, or whatever other monetary unit is in use, will be roughly the same as the cost in dollars. This means that a space fighter or giant robot will cost millions of credits. For this conversion, just use the US dollar price.

In other settings, big robots and spacecraft are pretty cheap — any scoundrel can own a star freighter and any mercenary aristocrat can have a giant robot — the relative cost is more like a big semi-truck or a light plane. If so, the GM may wish to use this formula instead:

Interstellar Credits = Mecha Points × 200 credits

Apply the same cost multipliers detailed for US dollars

### **Mecha Points as Gold Pieces**

In fantasy settings the GM may wish to price mecha in comparison to things like full plate armour or galleys, or compare their value to that of magic items or constructs such as golems. This cost scheme gives a price in gold pieces. It assumes that very powerful mecha are rare, and intended to give a reasonable price for sailing ships and other vehicles that are also built using this system:

Gold Pieces = Mecha Points × Mecha Points × 2 GP

Double the cost if the GM feels the mecha requires technology more advanced than the campaign setting, or magic.

For example, a boat built with 10 Mecha Points will end up costing 200 GP, while a medium-sized galley built with 100 Mecha Points will cost 20,000 GP. A potent magical steam-powered mecha built on 400 Mecha Points — capable of arm wrestling an iron golem or taking on a young dragon — costs 640,000 GP.

### **Mecha Points from Experience**

Characters can increase existing skills, increase existing traits, and under certain conditions develop completely new skills and traits. Which of these a player decides to pursue also determines how to proceed. With a Mecha in the picture the player has other options to spend experience points. GMs should use the following formula to develop their mecha.

**Character Improvement Costs:** 20 Mecha Points = 1 Experience Point

## **Design Check-list**

Follow these steps and record the notes and calculations on either the **Mecha Design Scratch Sheet** or a piece of paper.

Step 1: Mecha Concept and Type

Step 2: Mecha Size

Step 3: Mecha Attributes

Step 4: Movement Types

Step 5: Occupants and Cargo

Step 6: Mecha Modules

Step 7: Mecha Defects

Step 8: Weapons Systems Design

Step 9: Mecha Skill Requirements

The Finishing Touches

## **Step 1: Mecha Concept and Type**

### **Concept**

Decide on the basic concept of the mecha and how many Mecha Points you will spend on it. Here are some possible concepts:

#### **Aircraft**

These could be aeroplanes, helicopters, wind-powered sky-boats, or swift anti-gravity fliers.

#### **Armoured Fighting Vehicles (AFV)**

Conventional battle tanks, troop-carrying APCs, or Very Small mini-tanks for city fighting.

#### **MechaGojyraSauradapton!!**

GMs can also use the mecha rules to design giant-monsters-that-ate-Tokyo or other large animals.

#### **Piloted Giant Robot**

The classic humanoid battle machine with Operator riding inside the cockpit.

#### **Organic Mecha**

These living machines can be anything from a powered suit to a battleship.

#### **Powered Armour**

A form-fitting suit of strength-amplifying armour.

#### **Spaceship**

Small scout ships, sleek starfighters, rusty tramp freighters, or giant battleships and carriers.

#### **Super-Car**

It looks like a car but it may be bullet-proof, drive underwater, or even fly.

#### **Transforming Mecha**

A motorcycle that turns into powered armour or a big humanoid robot that becomes a fighter plane are examples of transforming mecha.

#### **Watercraft**

How about a sleek and deadly submarine, a powerful battleship, a stately galleon, or a fast hydrofoil?

## Mecha Types

There are four broad types of mecha. Decide which to create: a Suit, a Giant Robot, Vehicle or a Monster.

### Suit

A form-fitting suit of armour, worn rather than driven. This includes exo-skeletons and powered armour suits that are no more than 1.5 times as large as the wearer. A suit has no room for extra gear: the Operator must wear tight or no clothes, no armour (except for ultra-tech skin-tight armour), and bring no extra equipment. If a mecha suit takes damage, the wearer of the suit takes the same damage in Blunt Trauma. An attack may kill or disable the wearer without doing the same to the suit, in which case someone else could salvage the suit. This also may disable the suit while the wearer still has HITs left in which case he or she is trapped until the suit is removed.

### Giant Robot

A giant robot is a piloted humanoid or animal-shaped vehicle that is larger than its Operator and has creature-like agility and/or manipulatory ability, via means of limbs and/or a flexible body and jaw. A giant robot could be anything from a humanoid fighting machine to a mechanical sea monster. If it stays on the ground, and moves at no more than a high speed of around 110m/turn, a giant robot has the advantage that it moves like a character or creature — there is no need to use the vehicle movement rules when it goes into combat.

### Vehicle

A vehicle is a piloted mecha that is notably larger than its pilot and not classed as a giant robot. Vehicles include everything from ordinary wagons and cars to pirate galleons and space battleships. A machine with a simple bulldozer blade or tow arm is still considered a vehicle rather than a giant robot, since it lacks any flexibility of movement. Since most vehicles do not require large Strength attributes, they are cheaper than giant robots. Giant robots that choose to move faster than 110m/turn (130kph or 77mph) should use the vehicle manoeuvres and target numbers if they are scaled close to standard vehicles.

### Monster

Purchasing the Mecha "A.I." Module and not paying for Pilots or Passengers in Step 5 can easily conceive a monster or animal. GMs can still use the HITs Attribute and rules for damage, as most monsters seem to eventually recover when seriously injured past their HLT attribute. Modules representing "healing" can be purchased. Alternatively the GM may simply swap HITs for LIF and use the respective rules for that attribute. Monsters may look very powerful when comparing total MP costs against a mecha, but this would most likely be from the attribute and skill costs equivalent to creating a character. So perhaps a better method of judging would be to combine the total cost of the character and mecha and compare it to the total monster cost.

## Mecha Stat Block

Like creatures, mecha have a number of statistics. After a mecha is designed, record it using this format:

**Type:** Whether the mecha is a suit, giant robot, or vehicle.

**Class:** The general category of mecha, like "sailing ship" or "main battle tank." This is up to the designer to specify; the classes are not defined by the rules. This determines what Skills or Abilities are needed to operate the mecha.

**Size:** The mecha's size, which may range from Fine to Immense. List the longest dimension and mass in parenthesis, for example - "Gargantuan (32m tall, 100 tons)."

**Occupants:** The number of human-scaled occupants the mecha transports. If the mecha has both crew and passengers it will have two entries separated by a slash. The second is passengers.

**Mecha Attributes:** Mecha Skill Rolls are based on Pilot skill and mecha attributes.

**STR:** Attribute score for lifting and damage. Suits note as a  $\pm$  Modifier.

**HLT:** Hazard Load Tolerance of the Mecha. Suits note as a  $\pm$  Modifier.

**REF:** Manoeuvrability Attribute. Suits note as a  $\pm$  Modifier.

**DEF:** Mecha Handling. Note as a  $\pm$  to the Mecha's REF.

**INI:** Noted as a  $\pm$  Modifier to the Pilot's calculated Initiative

**AV:** Starting AV equals Mecha (STR + HLT)

**HITS:** Base HIT points equal Mecha (HLT  $\times$  Size Modifier)

**MOV/Type:** The mecha's Movement in the specified environment. Follow underwater speed with the depth it can dive and an air speed entry with the ceiling (for example, Ceiling - 4000m). If space flight, list the MOV scaled in G (for example, 3 G) and if realistic space flight, also G-actions and a parenthetical delta-V. If the mecha is a suit, or has FTL, a modifier is given instead of an actual speed, such as MOV/Terrain +20.

**Cargo:** The cargo the mecha can carry. Usually in kilograms.

**Mecha Modules:** Separated as Design Modules and Exotic Modules, these are the capabilities possessed by the mecha, such as sensors or an ejection seat. Mecha Modules are listed one at a time in alphabetical order. If a special advantage requires an additional notation (for example, the range of a sensor), list it in parenthesis.

**Mecha Defects:** Defects are the counterpoints to Modules. Defects list the limitations of the mecha. If a defect requires an additional notation (for example, the speed the mecha will stall at), list it in parenthesis.

**Weaponry:** The names of the weapons built into or carried by the mecha. Each weapon that is designed will be given its own Stat block. See Page 156.

**Required Skills:** Any Skills required to operate the mecha, such as Pilot.

**Cost:** The total Mecha Point cost of the mecha. If desired, a conversion to dollars, credits, gold pieces, or other Points may be listed in parenthesis.

Mecha that can transform or merge may have multiple Stat blocks.

Optionally list the individual Mecha Point costs (positive or negative) after each entry, for ease of modification or, if a player, to help the GM check your totals. If so, use the abbreviation MP for Mecha Points and list the cost in brackets after the entry.

## Step 2: Mecha Size

Decide how big the mecha is. The appropriate sizes for mecha are: Fine, Tiny, Very Small, Small, Medium, Large, Very Large, Huge, Gargantuan or Immense.

If creating a mecha suit, it must be the same size as the intended wearer. A suit for a human is medium size; a suit worn by a Gargantuan dragon will also be Gargantuan.

If creating a vehicle or giant robot, it must be at least one category larger than the largest being it is intended to carry. Thus, a giant robot or vehicle big enough for a human to ride inside must be at least Large.

Many giant robots or vehicles will be more than one size category larger than their intended occupants. Exception: If the occupant will ride on it, like a bike or surfboard, it can be up to two sizes smaller.

Specify its dimensions (tall) or (long). Most vehicles are long; suits and giant robots tend to be tall if humanoid, or long otherwise. Specify the mecha's longest dimension (height if tall, length if long) and empty weight, choosing from within the available ranges given on the Size and Weight chart.

The mecha scale is similar to the character scale presented in the MechASsemble Core; however is slightly more detailed for easier determination of a mecha's dimensions.

### Mecha Scale Size and Weight Chart

Size	Example	Dimension	Weight	DEF Modifier
Fine	Micro-machine	up to 15 cm	up to 250g.	-8
Tiny	Small toy	15 - 30 cm	125g to 5kg.	-6
Very Small	RC toy	30 - 60 cm	2.5 to 25kg.	-4
Small	Police RC robot	60 -120 cm	13 to 130kg.	-2
Medium	Motorcycle	1.2 - 2.5 m	50 to 500kg	0
Large	Small car	2.5 - 5 m	1/2 to 4 tons	+2
Very Large	Luxury car	5 - 10 m	2 to 40 tons	+4
Huge	Heavy tank	10 - 20 m	10 to 400 tons	+6
Gargantuan	Jumbo jet	20 - 50 m	50–1,000 tons	+12
Immense	Battlecruiser	50 m or more	1,000+ tons	+14

The DEF Size Modifier is presented as a handy reference and expands on the Action! System's Combat Modifiers Table.

A good way to estimate weight for massively-sized mecha: weight in tons = (longest dimension × longest dimension × longest dimension) divided by 1,000. The overlap between size categories is intentional, since a smaller mecha might be tougher than a larger one if made from especially durable materials.

More target modifiers can be found in the Action! System Combat section.

*Some examples of common mecha sizes:*

- Medium size: Powered armour, motorbike or dinghy.
- Large: A small car, speedboat, van, limousine, or light aeroplane. A 3m-tall Suit of Powered Armour.
- Huge: A large car, small armoured personnel carrier (APC), a truck or WWII-era fighter. A 5-10m giant robot.
- Gargantuan: A 32m tall giant robot. Boeing 727 Passenger Jet
- Immense: Anything larger, from the size of a battleship to a giant starship.

## Step 3: Mecha Attributes

Mecha have "Body" attributes similar to characters. The following list compiles the various attributes created during the Mecha's build phase. These are called the "Mecha Group" of attributes to differentiate between a character's Health and a mecha's Hazard Load Tolerance.

Operators use their skills to pilot mecha, however the mecha attributes show just how capable the mecha design is in carrying out the operator's intentions.

Campaign Power Level	Max Att.*	Max STR**
Low-powered game	4	15
Average-powered game	5	20
High-powered game	8	30
Very high-powered game	10	40
Extremely high-powered game	None	None

\* Refers to Manoeuvrability (REF) and Hazard Load Tolerance (HLT)

\*\* This is a guide for general mecha or vehicle types. Purpose-built heavy lifters such as cranes can surpass these maximums if the design warrants.

### Controlling the Mecha

Operators do not rely on their own attributes to manoeuvre a mecha but their skill. There is a slight variation to the Action! System norm in that the mecha's attributes come into play when rolling the skill to control it. Whenever a mecha skill requires STR, HLT or REF attribute checks the mecha's attributes are used instead of the character's.

Skill checks requiring the pilot's Mental Group will of course be rolled against the character's attributes.

### Artificial Intelligences or Monsters

A.I mecha will merely add it's intricately programmed Mental Group to the mecha's attributes and skill checks become identical to character rolls.

## Mecha Group

These attributes directly influence the mecha concept. In short, the core attributes define the mecha's strength, tolerance and movement aptitude.

### Mecha Strength (STR)

Strength (abbreviated STR) is the "Power" attribute for the Mecha Group. STR represents raw physical prowess, including the ability to lift, push and otherwise exert force. STR is also important to calculate the mecha's cargo capacity (see Step 5 on [page 127](#)). The following table shows what is presented on the [Mecha Strength Range Chart](#) on [page 177](#). A vehicle can carry the equivalent to the Dead lift weight as cargo unless limited by the cargo capacity in Step 5.

STR Attribute Use	Equivalent to
Dead Lift Ability	Vehicle Cargo Capacity
Drag or Pull Capability	2x Dead Lift Weight
Humanoid Carry Limit	½ Dead Lift Weight

*Example, Tom's warrior robot has a STR of 20. It can dead lift 12.5 tons, it can carry 6.5 tons, and it can drag or pull up to 25 tons! A Semi truck rig with a STR of 22 can haul 25 tons of cargo in standard conditions up to maximum speed.*

A Mecha suit's Strength modifier is a bonus to its wearer's Strength Attribute score. A giant robot's Strength attribute replaces its wearer's Strength attribute when operating the mecha. A vehicle's Strength score also represents its dragging/towing capability.

The size cost modifier for calculating a strength attribute is 10 if fine, 9 if Tiny, 7 if Very Small, 6 if small, 5 if medium, 4 if large, 3 if Very Large, 2 if Huge, or 1 if Gargantuan or Immense.

**Mecha Point Cost:** For giant robots and monsters, this is **STR × Size Cost Modifier**. Vehicles can halve the final MP cost, as they aren't designed to lift. Therefore, a Gargantuan robot with STR 40 would pay  $40 \times 1 = 40$  Points. For suits, this is 20 per +1 STR. Thus, a suit with a STR +5 costs 100 Points.

### Hazard Load Tolerance (HLT)

Hazard Load Tolerance (abbreviated HLT) is the "Resistance" attribute for the Mecha Group. HLT reflects the mecha's overall design, general reliability, resistance to systems disruption, and structural integrity. The higher a mecha's load tolerance, the more resistant it is to systems disruption and damage. A HLT of 0 represents an absence of structural integrity (i.e., destruction). Scores higher than 10 are ultra-tech or supernatural. Creatures, legendary mecha, superheroes, and otherwise extraordinary machinery are not subject to the maximum score of 10 rule.

**Mecha Point Cost:** For monsters, vehicles and giant robots, the calculation is **HLT × 10 Points**. Thus, a Gargantuan robot with HLT 4 would pay  $4 \times 10 = 40$  Points. For suits, this is 20 per +1 HLT. Thus, a suit with a HLT bonus of +5 to the wearer's Health Attribute costs 100 Points.

Attribute	Example
1	Bicycle, Hang-glider, Rubber dinghy
2	Aluminium skiff, Wild West Wagon
3	Civilian Automobile, WW2 Aircraft, large yacht
4	Civilian Truck, Light Jet Aircraft, Light Power Armour
5	Military Vehicles/Power Armour, Civil Defense Robot
6	Large Civilian Aircraft (747), Cargo Tanker, Heavy Mecha Suit, WW2 Submarine
7	Modern Main Battle Tanks, Modern Submarines, Giant Military Robot
8	Futuristic High speed/altitude aerospace vehicle, Advanced Military Vehicles
9	Ultra-deep submersible, super robot, Monster-that-ate-Tokyo
10	Massive ultra-robot, mega-mobile base, Jupiter/Saturn Mining vessel.

## Manoeuvrability (REF)

Manoeuvrability (equivalent to a character's REF) is the "Aptitude" attribute for the Mecha Group. REF covers the mecha's constructed capability at agility, coordination, reaction, and overall speed. The higher a Mecha's Manoeuvrability, the more dexterous and agile it is, and the better the balance of mechanism design. If the mecha has multiple types of movement then a higher base manoeuvrability would be beneficial (see step 4).

**Mecha Point Cost:** For monsters, vehicles and giant robots, the calculation is **REF × 10 Points**. Thus, a Gargantuan robot with a base REF 4 would pay 40 Points. A Mecha's REF score may not exceed 10 in Realistic-level games, though it may be higher in Cinematic and Extreme level games. For suits, this is 20 per +1 REF. Thus, a suit with a REF bonus of +5 to the wearer's Reflex Attribute costs 100 Points.

Attribute	Examples
1	Open Cut mining dredge, Ocean Passenger Liner
2	Wind-powered ocean vessel, big-rig semi trucks
3	Civilian/Military automobile, large walking tank mecha, main battle tank,
4	Racing car, empty cargo plane
5	Large motorcycle, heavy power suit, humanoid robot, WW2 fighter plane, powerboat
6	Off-road motorcycle, military mecha suit, animal robot, private passenger jet, airborne jet fighter
7	High-tech rocket pack, mind-melded robot warrior, swamp propeller skiff
8	Water jetski, medium sized helicopter, modern space vehicles (in space)
9	Small helicopter, high-tech robot warrior, ultra-tech aerospace craft
10	Ultra-nimble mecha suit, small magical robot animal warrior

## Derived Mecha Attributes

There are also a few special attributes. They are not assigned points during mecha creation like the core attributes. Instead, the following attributes are derived from Mecha Group. Derived attributes in the MechASsemble are Defensive Target Number, Initiative, Armour Value and HITs. GMs can create new derived attributes in addition to these.

The cost for increasing each Derived Attribute above its base score is given in the description. Derived Mecha

Attributes are noted on mecha combat sheets as a  $\pm$  modifier to the Pilot's attributes. This means that when a new pilot is operating a mecha their skills affect the way the mecha performs.

### Handling (DEF)

A Mecha's handling is equivalent to the Defensive Target Number (abbreviated DEF) and represents how difficult it is to successfully hit the mecha in combat. Handling becomes the base Target Number (TN) needed for any skill rolls made to hit the mecha in combat, for hand-to-hand, melee and ranged attacks. This means the players do not need to incorporate the target modifiers for mecha size as they are already incorporated into the mecha's Handling Attribute. A Mecha's DEF score may be modified up or down for variables such as distance, and so on. It is based on how agile and quick to accelerate or turn the mecha is. Handling values only apply to giant robots and vehicles. Mecha suits do not have these size modifiers, as they are an extension of the wearer. Handling in MechASsemble is equivalent to the vehicle MB attribute in Action! System once vehicle size modifiers have been included.

Mecha Handling equals the **Manoeuvrability + 10**

In combat the mecha's size modifier will become very important when facing larger or smaller opponents.

Most vehicles possess the base value. Agile mecha like giant robots or motorbikes usually add +1 to +4 points — for example, a typical motorcycle might have a +13 manoeuvre, a car might have a +2, while a large tank has -2.

**Mecha Point Cost:** 0 Points for the base value given above. Each +1 over this size-derived base value costs 12 if fine, 14 if Tiny, 16 if Very Small, 18 if small, 20 if medium, 22 if large, 24 if Very Large, 26 if Huge, 28 if Gargantuan or 30 if Immense. Each -1 below this starting value refunds the same Points. Mecha Suits can purchase/refund Handling as a  $\pm$  modifier to the wearer's DEF based on the suit's size.

### Mecha Initiative (INI)

Initiative (abbreviated INI) represents how quickly a mecha can act in a turn. The mecha with the highest INI total acts first in a turn. In cases of a tie, the mecha pilot with the higher INT goes first. If both pilots have the same INT, then the Mecha act simultaneously.

For more information about how Initiative works, see the Action! System section on *Combat*.

This adds to pilot initiative checks. It is usually based on a vehicle's mass and momentum, and thus is normally a number equal to the size modifier. The mecha combat sheet will have the modifier to the pilot's INI which Mecha Initiative is based.

Mecha Initiative equals the **Pilot's INI + Initiative Size Modifier** and is noted in the mecha description as a  $\pm$  modifier to the pilot's attribute.

Initiative Size Modifiers are +6 if fine, +2 if Tiny, +1 if Very Small, -1 if small, -2 if medium, -4 if large, -6 if Very Large, -8 if Huge, -10 if Gargantuan or -14 if Immense

Initiative Size Modifiers are rarely increased above the starting value, but an increase could be justified for one that (for example) flew using anti-grav technology or was fast to accelerate. A Mecha's Initiative score may not exceed 10 in Realistic-level games, though it may be higher in Cinematic and Extreme level games (though unlikely).

**Mecha Point Cost:** Initiative may be increased or decreased at a cost of 30MP for each point of Initiative.

### Armour Value (AV)

The Armour Value indicates the amount of points of protection that the armour affords and is equivalent to a character's TGH score. Each point of AV reduces damage inflicted upon the mecha by 1 point. For example, an AV of 10 would reduce a 16-point attack to a 6-point attack. The armour's AV protects from all forms of damage unless otherwise noted in the description (e.g., energy shielding could be designed to diffract laser weapons and does not protect as well against bullets and Rail Gun rounds). Suits do not include the pilot's HLT and STR attributes in the AV calculation.

Mecha's starting AV equals **Mecha STR + HLT**.

If a mecha suffers an amount of damage that does not exceed its Armour Value score, it suffers no loss of HITs; the mecha has completely shrugged off the attack.

**Mecha Point Cost:** Armour Value may be increased at a cost of 5 MP for each additional Armour Point. If the AV attribute is too high for the Mecha Concept then refund 10 Mecha Points per Armour Value until the concept's level is achieved.

### Mecha HIT Points (HIT)

While living creatures have LIF points, non-living things have HITs. HITs work just like LIF points do; except that a mecha that has its HITs reduced to 0 doesn't "die" (the mecha isn't alive in the first place). Instead, when a mecha's HITs are reduced to 0, the mecha is presumed disabled. "Disabled" can mean several things, depending on the nature of the mecha and the GM's judgment. A "disabled" mecha becomes inoperable. When a mecha has sustained damage equal to twice its HITs, it is demolished, and rendered beyond repair. Suits do not include the pilot's HLT attribute in the HITs calculation.

A mecha's size level modifier for calculating HITs is 2 if fine, 3 if Tiny, 4 if Very Small, 5 if small, 6 if medium, 7 if large, 8 if Very Large, 9 if Huge, 10 if Gargantuan and 15 if Immense

Mecha's Base HIT points equal **Mecha HLT  $\times$  Hit Point Size Modifier**.

**Mecha Point Cost:** Mecha HITs may be increased at a cost of 2 MP for each additional HIT Point. If the HIT attribute is too high for the Mecha Concept then refund 2 Mecha Points per Mecha HIT until the concept's level is achieved.

### Armour Vs HIT Points

There is some variation throughout the Action! System and MechASsemble books in regards to amounts of A.V and HITs on various similar vehicles and objects. The cost structure is intentionally too great to maximize both A.V and HIT attributes (and wouldn't necessarily be a fun mecha to play in any case). From a design and concept point of view, the mecha creators must decide on one of two paradigms:

1. The armour is high enough for damage to just chip away at the mecha's HITs. This concept is good for Military applications where the design is intended to stay in the fight for as long as possible.



2. The HITs attribute is high enough to compensate for the extra damage that the lower A.V lets through. The benefit for this choice is that the mecha can take more "post-disabled" damage before being utterly destroyed (see Taking Damage on [page 180](#)).

#### Example Object AV/Hits Table

Material or Object	AV	Hits
Airlock door	24	21
Armoured car	24	54
Automobile	9	45
Bicycle	9	6
Cart, large	12	36
Cart, small	9	24
Chariot	12	24
City gates, large, wood	24	60+
City gates, small, wood	15	30
Exterior wood door	12	9
Helicopter (Civilian)	9	52
Helicopter (Combat)	15	55
Hovercraft	15	52
Jetpack/EVU	12	12
Metal fire door	15	15
Motorcycle	9	33
Plane, light	9	39
Plane, multi-engine	9	54
Plane, twin engine	9	45
Railroad car	18	45
Safe door	30	9
Spaceship, capsule	30	30
Spaceship, intermediate	30	60-120
Spaceship, large	45	90-240
Submarine	30	60
Tank (bottom armour)	42	
Tank (front armour)	60	60
Tank (side/top armour)	48	
Truck or bus	12	51
Vault door, large	48	27
Vault door, small	45	24
Wagon, covered	9	36

## Step 4: Movement Types

The Manoeuvrability (REF) attribute bought in Step 3 is the basis for spending Mecha Points for the movement types listed below. Depending on the mecha concept use this section to buy the Mecha's Movement Type (abbreviated MOV/Type).

A Mecha may move up to it's MOV in meters each turn, as a normal Move action or, if running, up to 2x it's MOV in meters per turn. A Mecha may also sprint, moving up to 3x its MOV in meters per turn, but a Mecha can only achieve sprint level speeds for a maximum number of turns equal to its HLT before systems performance is affected. See various Mecha Modules for alterations to the Hazard Load Tolerance limitation.

Imperial and Metric speeds, in Miles per hour and Kilometers per hour respectively, can be brought to a common denominator in the Movement attribute. It is easy to think of the meters (or yards) per turn as being close to the mecha's speed in mph or kph.

### Maximum Speed and Movement

A mecha's speed in MechASsemble (except for space or FTL) is measured in kilometers per hour (kph) or miles per hour depending on the players' country of origin or military service. Use these rules to determine vehicle or giant robot speed. Special rules apply to mecha suits. If designing a mecha suit, refer to Mecha Suit Movement (p.22). These calculations take into account the sprint rules for movement.

#### Conversions

Starting Variable	Factor	to Get
Movement in meters per Turn	× 1.2	Kilometers per hour
Movement in meters per Turn	× 0.7	Miles per hour
Top Speed in Kilometers per Hour	÷ 3.6	Base Movement (MOV/Type) accounting for sprint (MOV ×3) actions.
Top Speed in Miles per Hour	÷ 2.1	Base Movement (MOV/Type) accounting for sprint (MOV ×3) actions.
Mecha Movement (MOV/Type)	× 3.6	The maximum attainable speed of the mecha in Kilometers per hour
Mecha Movement (MOV/Type)	× 2.1	The maximum attainable speed of the mecha in Miles per hour

### Mecha Movement

MOV/Type	Description
----------	-------------

Terrain	Ground Effect movement such as treads, wheels or legs
Hydro	Water Movement. Underwater depth is noted.
Aero	Flight Movement with the Ceiling Height noted.
Space	A form of Scaled MOV depending in Campaign Reality levels based on multiples of Gravity (G's)

## Abridged Movement Table

See the ASSEMBLER CORE for an extended movement table.

MOV	Kph	Mph	Example (based on max speeds)
1	1.2	0.7	
5	6.0	3.5	M113 APC (water speed)
40	48.0	28.2	Fastest recorded human running
50	60	35.3	Aircraft carrier, Queen Mary
55	66	38.8	Destroyer, Ocean liner, M113 APC
65	78	45.9	M1A1 Abrams (tank), M-2 Bradley AFV
75	90	52.9	T-72 tank
85	102	60.0	Highway driving speed
100	120	70.6	Max hwy. speed limit (U.S.)
120	144	84.7	Economy car (max speed)
125	150	88.2	Passenger train
130	156	91.8	MLB fast-ball pitch
180	216	127	Police patrol car (max speed)
200	240	141	Single-engine private plane
220	264	155	Single-engine private plane (cruising speed)
230	276	162	AH64 Apache
240	288	169	F6F Hellcat cruise (max 380 mph)
250	300	177	CH-47 Chinook
280	336	198	Nascar Racing Car
700	840	494	C-17 cargo jet, 757 (528 mph)
800	960	565	B-52
1000	1,200	706	Sound barrier (approx. 742 mph)
1200	1,440	847	Land speed record
1800	2,160	1,270	F18 Hornet (1,318 max)
2400	2,880	1,694	F-15 Eagle (max)

## MOV/Terrain

Mecha will have a MOV/Terrain statistic if it is capable of sustained movement and manoeuvre on the ground. This usually means it has legs, wheels, tracks, or a combination, or perhaps even a snake-like body. MOV/Terrain is unnecessary if the mecha, such as a helicopter or a boat, cannot move on land or only does so as a short take-off or landing (for example, an aeroplane.).

### Some examples of land speeds:

- 16kph are typical of bulldozers or lumbering steam-powered mecha.
- 48-80kph is a good speed for a giant robot or a modern tank.
- 160kph is a typical top speed for an ordinary car, while a sports car or racing bike could do 240-280 kph.
- 1,200kph is just above Mach 1, the speed of sound. A rocket-powered car travelling at about that speed holds the current world land speed record.

**Mecha Point Cost:**  $(5 \times \text{MOV/Terrain})/\text{Mecha Manoeuvrability}$ .

*Example: A super car has MOV/Terrain attribute of 280. If the Mecha Manoeuvrability attribute of that Super car was 10, then 140 Mecha Points were spent to get allow the vehicle attain a maximum sprint speed of around 1000kph. This cost could be reduced with the Booster Module.*

## MOV/Hydro

This is the maximum speed the mecha can move in or under water. If the mecha can move underwater, purchase an Underwater MOV/Hydro attribute as well as a surface Speed that can be the same or higher than the underwater attribute. Suits use special rules; see Mecha Suit Movement. It is also possible just to by some Hydro Depth to represent the fact that the mecha can function underwater but is not suited to manoeuvre.

### Some examples of watercraft speeds:

- 8 kph is typical of slower sailing craft or rowboats.
- 16 kph is typical of faster sailing craft, galleys, mini-sub, or amphibians.
- 40-56 kph is typical of modern ocean-going ships.
- 90 kph is typical of speedboats and hydrofoils.
- 511 kph is roughly the world water speed record for a jet-powered speedboat.

If the mecha can dive and travel underwater, select its maximum dive depth, in feet or meters. Historically, the first 19th-century submarines could dive no deeper than 15m. By World War II, subs reached 200m; today's nuclear subs dive to 300-500m. Specialized research/salvage craft can dive much more deeply — a depth around 11,000m is a world record.

**Mecha Point Cost:**  $(5 \times \text{MOV/Hydro})/\text{Mecha Manoeuvrability}$ . If the Mecha Manoeuvrability attribute is too fast for the mecha concept refund 10 MP per attribute point reduced.

Each HLT attribute in meters/yards of diving depth costs 1 Mecha Point. The Mecha can dive its HLT in meters  $\times$  the Mecha Points spent. Thus, a mecha with an HLT of 10 can dive 3,000m for 300 Mecha Points.

## MOV/Aero

Some mecha can fly through the air. If the mecha can fly, decide how: wings and jets or propellers, rotors, rockets, anti-gravity, flapping wings, hot air, magic, etc then select a MOV/Aero attribute and ceiling.

Select the mecha's flight ceiling in meters (x3 for feet). This is the highest altitude it can reach. Typical ceilings are 1,500-5,000m for helicopters, 3,000-12,000m for propeller aircraft, and 10,000-24,000m for jets.

For very fast mecha such as fighter jets, it is more cost-effective to give the mecha a MOV/Aero attribute up to its expected maximum combat speed, and then take the Booster and/or Mach Booster Mecha Modules. This represents use of afterburners. Most balloons should take a low speed and the Wind Powered Defect.

If the mecha lacks any propulsion system (such as a flying building or tethered balloon) pay only for it's ceiling. Suits use special rules; see Mecha Suit Movement, below.

### Examples of air speeds:

- 30 kph is a good balloon speed.
- 90 kph is the maximum horizontal speed of a peregrine falcon, the fastest bird.
- 240 kph is typical of fast helicopters or light propeller aircraft.
- 640 kph is a fast late WWII propeller-engine fighter aeroplane.
- 880 kph is a typical civilian jet (or a ground attack fighter).
- 1,200 kph is roughly the speed of sound; it's typical of a jet fighter without afterburners.
- 2,400 kph is typical of a fast interceptor like the F-15 Eagle, using afterburners.
- 3,520 kph is the fastest jet aircraft, the SR-71 Blackbird.
- 27,400 kph is the speed required to reach orbit, and 40,000 kph is Earth's escape velocity, enough to escape its gravity into deep space.

**Mecha Point Cost:**  $(5 \times \text{MOV/Aero}) / \text{Manoeuvrability Attribute}$ . The Mecha can climb to 20x it's STR in meters at no cost. To increase the ceiling height the cost is 1 Mecha Point for every 20x STR in meters/yards. Thus, a mecha with an STR of 10 can climb to 10,000m for 50 Mecha Points.

## Mecha Suit Movement

Unlike a giant robot or vehicle, a suit's movement is based on the capabilities of its wearer. For example, a human's suit will let the wearer walk, a dragon's suit will let him walk and fly, and a mermaid's will let her swim.

Sometimes the suit's weight will slow the wearer down, but mecha suits often (but not always) include a powered assist that allows the wearer to run faster and jump greater distances.

Select the suit's Movement multiplier. This can be  $\times 2/3$ ,  $\times 1$ ,  $\times 1.5$ ,  $\times 2$ , or  $\times 3$ .

If the wearer is capable of multiple movement types, select the multiple for each movement type (paying Mecha Points separately). For example, a dragon will select ground and air movement for its suit.

The speed multiplier will be applied to the suit wearer's normal movement to determine his or her speed when using the suit. Thus, a human's normal MOV attribute is 5, so in a suit with a  $\times 1.5$  multiplier he would move at 8m per turn. A speed multiplier of  $\times 2/3$  means the suit has no power assist, slowing the wearer to  $2/3$  his or her Movement, much like a normal suit of medium or heavy armour does.

**Mecha Point Cost:** This is  $100 \times \text{Movement multiplier} \div \text{Mecha Manoeuvrability attribute}$ . For example, if the movement multiplier was  $\times 1.5$  and Mecha Manoeuvrability attribute was 6, it would cost  $(100 \times 1.5/6)$  25 Mecha Points.

A suit may also buy air, water, or space (but not land) movement if its wearer does not normally possess that capability. For example, a human's suit could buy air speed and manoeuvrability, representing a jet pack or mechanical wings. Use the rules for giant robots to determine the Point cost of this movement.

## Space Movement

The mecha can propel itself in space. There are four ways to travel around in space: Realistic Space Flight, Dramatic Space Flight, Space Sails, and Faster-Than-Light (FTL).

The GM may rule that some of these methods are not available in a game. For example, a "hard science fiction" setting only Realistic Space Flight or Space Sails may be available. On the other hand, a space opera setting might use Dramatic Space Flight and FTL Drive. With space movement the MOV/Space attribute is a scaled mechanism for "thrust" in a vacuum.

### Realistic Space Flight

The space drive blasts out mass (often heated or energized) to produce thrust. It is limited by the amount of reaction mass carried aboard. Depending on the technology, the reaction mass could be anything from rocket fuel to alchemical powder. Many science fiction spacecraft are fusion drives, using water or hydrogen.

#### MOV/Space – Thrust

This is how fast the spacecraft can increase its velocity or change its course — both are the same thing. It is measured in gravities, or G: a thrust of 1 G is an acceleration equal to Earth's gravity, roughly 9.8 m per second per second. In game terms, it can be assumed — with a great deal of abstraction — that each G of thrust lets the mecha increase or decrease its current velocity by about 30m/Turn

#### G-Actions

This is a measure of how long the mecha can accelerate before using up its on-board reaction mass (once this happens it can just coast). Mecha uses up 1 G-Action each time it uses 1 G of thrust for one action. If it accelerated at 2 G (assuming it can) for five actions, it would use up 10 G-Actions; if it accelerated at 0.1 G for 1,000 actions, it would use up 100 G-Actions, and so on.

#### Delta-V

For the realism-inclined, delta-V is a measure of the top speed a mecha can build up to before it runs out of reaction

mass and must coast. Most mecha, when travelling, will only accelerate to a velocity no more than half their delta-V to ensure they have sufficient reaction mass to decelerate again (since deceleration is an application of reverse-thrust).  $\Delta V = G\text{-Actions} \times 200\text{kph}$ ; thrust does not figure into this. If a mecha has a thrust of at least 2 G and a delta-V of about 32,000 kph or more, however, it has enough thrust to lift off from Earth and boost itself into orbit (40,000 kph is escape velocity).

Note that exhausting all a mecha's on-board reaction mass isn't the same as running out of power or life support — a mecha with a reaction engine can still function perfectly normally if it's out of reaction mass; it just can't accelerate or decelerate in space.

Select the mecha's thrust in G (this may be a fraction) and its G-Actions (usually a multiple of acceleration). Most short-range "space fighter" type mecha should have a number of G-Actions equal to at least  $10 \times$  their acceleration. Long-range spaceships should have enough G-Actions to give them a delta-V of 1,000 or more, which usually means accepting a lower acceleration.

**Mecha Point Cost:** Cost (per drive) is  $\text{MOV/Space (in G)} \times \text{G-Actions} \div \text{HLT}$ . For example, if a Huge space fighter with HLT 10 has 3 G thrust and 100 G-Actions (Delta V 20,000kph); the Mecha Point cost is  $(3 \times 100) \div 10 = 30\text{MP}$ .

## Dramatic Space Flight

The mecha can accelerate constantly for as long as it has power — it ignores mundane considerations like reaction mass, so the top speed is limited only by its endurance (see Defects) or any physics-based considerations the GM wishes to impose, like the speed of light. Sure, that defies the laws of physics, but if 20m tall giant robots exist, who is going to care?

Select acceleration in G: each G lets the mecha increase its speed by 200m per action (thus, 0.1 G would allow 20m, while 6 G would allow 1200m). If it stops accelerating, it will continue moving at its listed speed. It can decelerate instead of accelerating; reducing its speed by its MOV/Space thrust rating (thus, -20m for 0.1 G or -1200m for 6G).

**Mecha Point Cost:** The cost is  $\text{MOV/Space in G} \times 10$ .

*Note:* in some universes, all spacecraft may accelerate much faster. If appropriate, the GM can modify this; replace "thrust in G" with "in 10s of G," "in hundreds of G," or another appropriate value for the campaign setting.

## Space Sails

Space is not empty — it is awash with a sea of energy. Stars, such as our own Sun, emit both light and a powerful "solar wind" of high-energy particles such as protons. Enormous sails — often many tens or even hundreds of kilometers across — can be constructed to allow spacecraft to catch the stellar winds (though the sails can certainly be much smaller depending on the campaign setting).

Use the rules for Dramatic Space Flight, above, but usually with thrust ratings well below 1 G, clumsy space manoeuvrability, and the Wind Powered Defect. A realistic light sail or magnetic sail that catches solar photons or protons has a thrust of well below 1/10 G, but a magical ether sail may be much more effective.

Space sails may have their acceleration increase dramatically if their thrust can be boosted by an appropriate outside source, for example, a giant laser cannon beaming energy into a light sail, a solar storm, etc.

## Faster than Light Movement

This allows a mecha that is already in space to travel between the stars at faster-than-light (FTL) speeds. Some stardrives let a mecha fly at impossible speeds, while others side-step normal space by travelling through some kind of hyperspace or instantly jumping from point to point.

Some FTL drives are only good for interstellar trips, and require ordinary reaction drives, space sails, or dramatic drives as well. For example, the FTL drive may not function close to a planet's gravity, thus requiring the first few tens of thousands of kilometers to be made using a conventional drive. Alternatively, it might only connect certain natural or artificial "jump points" or "wormholes" that must first be reached.

Many FTL drives have no manoeuvrability at all. The navigator programs in a course, and the spacecraft flies in a straight line (either through normal space or some manifestation of hyperspace), or ducks out of space together and reappears at the destination, either instantly, or after a set time has elapsed. Others let the mecha manoeuvre freely, but at many times the speed of light. Note that if this capability exists and is not limited as described above, it will render conventional space flight obsolete and let FTL-equipped vessels fly rings around ordinary craft.

The GM should decide exactly how each FTL drive works, whether a trip is instant, or takes hours, weeks, or months, and if it has a maximum range or other limits. There may be problems that prevent a ship instantly escaping, such as engines that take a long time to recharge or those that exhaust their fuel between trips. Navigation could be tricky, requiring a Navigate check to avoid being lost in space or ending up some place unintended (perhaps with a TN based on distance in light years). In some campaigns, only large spaceships have the room to mount a Stardrive. If so, the GM may require a minimum ship size as a prerequisite.

Combat would be scaled according to the slowest FTL speed between 2 vessels and becomes very "cinematic."

The GM should assign a base interstellar **MOV/FTL** (or distance, for instant jumps) in light years, or parsecs, such as 1 light year/day or 1 parsec/week. This is the speed of the slowest starship. FTL speed is expressed as a multiplier to that speed, for example,  $\text{FTL} \times 3$  means it can travel three times as fast as the slowest spacecraft. The GM may wish to set a maximum multiplier, for example,  $\times 6$  or  $\times 10$ . The GM may only allow one FTL speed. If jump involves going through a jump gate or wormhole to whatever point connects it, for instance, then it is reasonable to assume that all ships travel to that point at the same pace.

**Mecha Point Cost:** 20 MP per multiple of standard interstellar speed divided by the HLT attribute. If it can manoeuvre in FTL space, multiply the cost by 5. If it "breaks the rules" (jumps without a wormhole when other ships require one, etc.) apply a  $\times 2$  to  $\times 10$  cost multiplier depending on how much of an advantage this gives with the campaign. This means a mecha, with a HLT of 6, which can achieve the campaign FTL speed of "Factor 3" will pay  $(20 \times 3/6)$  10 MP for the FTL speed.

## Step 5: Occupants and Cargo

### Occupants

#### For vehicles and giant robots

Decide how many medium-sized occupants are carried. An occupant may be a crewmember or passenger, usually seated but sometimes standing. The maximum is 1 if Small, 2 occupants if Medium, 4 if Large, 10 if Very Large, 20 if Huge. If a Gargantuan or Immense mecha, the only limit is the optional realism consideration detailed under Maximum Loads.

**Operators** are crewmembers who can use the mecha's systems in action: pilots, gunners, battery commanders, as well as equipment operators who main crucial systems such as sensors or communications. Many mecha have only one Operator, the pilot or driver; others have several. In a large naval vessel or starship, these are usually the bridge crew and gunners. Mecha that require many people simply to keep it operational have the Service Crew Defect.

**Passengers** are everyone else. This includes passengers, but also maintenance and service crew, such as cooks, medics, engineers, sailors, troops, battery weapon loaders, and even off-duty ops crew for smaller mecha carried aboard. Not all mecha have passengers.

Decide on how many Operators and how many passengers are carried.

**Mecha Point Cost:** 10 per Operator, 4 per passenger. Exception: If mecha is Gargantuan or Immense and has 25+ passengers aboard, the cost decreases to 26-50 passengers costing 100 Points, 51-100 passengers are 150 Points, 101-200 cost 200 Points, 201-400 cost 250 Points, etc., at +50 Points per doubling of capacity.

### Cargo

Vehicular Mecha may devote space to cargo. This can be either an internal cargo hold or trunk, or an external cargo bed, or even under wing pylons. Some or all of a mecha's cargo may be designated as liquid tankage or hangar space if desired; there is no extra cost for this, but it cannot easily be used for much else. Not all mecha have cargo spaces.

The mecha's STR attribute is the basis for cargo space. Use the Dead Lift column on [page 177](#) to determine the cargo capacity of a mecha. If the mecha concept does not require all it's STR carrying capacity for cargo space then there is a refund available.

**Mecha Point Cost:** If the Mecha's Strength (STR) attribute is fully utilized as cargo capacity there is no extra cost. Refund -1 MP for every STR attribute not required for cargo capacity. *This means a bulldozer-type vehicle with a STR of 22 (capable of Pushing/Dragging 50 Tons) but with a limited cargo carrying capacity of around 2 tons (STR 15 according to the Dead Lift column on [page 177](#)) would get a deduction of -7 MP.*

Suits, robots or animal mecha usually don't get a cargo refund, but can instead purchase "100kg capacity equipment lockers" as Accessory Modules (1MP). However, this is not always the case and should depend on the design concept.

Passengers in cargo areas do not afford any protection from impacts or the inertia from any sudden movements.

Using the Falling damage table in the Assembler Core it can be extrapolated what damage passenger cargo can receive during non-ideal driving conditions (i.e. combat or rough terrain/turbulence). To derive higher Movement damage see the Action! System Falling table and multiply the meters traveled per second (m/s) column by 3 to calculate the meters/Turn figure. *For example terminal velocity is stated as 60m/s on the table, which equates to a MOV of 180m/Turn (216kph or 126mph)*

#### Movement Damage Table

Velocity (m/Turn)	Random Damage	Flat Rate Damage	Examples
MOV 6	1d6	3	Fall off 6-foot ladder
MOV 12	2d6	6	60 degree turn at speed
MOV 18	3d6	9	Fall off 2-story building
MOV 24	4d6	12	Extreme manoeuvres at speed
MOV 30	5d6	15	Fall off 5-story building
MOV 36	6d6	18	Sudden stops from high speeds
MOV 42	7d6	21	Fall out of Mature Oak tree
MOV 48	8d6	24	Jump Stunts after landing
MOV 54	9d6	27	Sideways slam into immobile structure at speed.
MOV 60	10d6	30	Fall off 10-story building

### Maximum Loads

For realism's sake, total weight of occupants and cargo in a giant robot or vehicle should rarely exceed half the mecha's weight. Treat occupants (including seats, etc.) as 200kg, that is, 5 occupants to a ton.

#### Braking Hard at Maximum Cargo Capacity

Usually a driver may decelerate by more than one speed category per turn, coming to a dead stop from a Sprint (or equivalent). This increases the driving TN of the manoeuvre by 6. With cargo at full capacity, the additional weight increases the stopping time by 2 Turns per speed category if Large or Very Large Size, 3 Turns if Huge and 4 if Gargantuan or Immense.

### Mecha Suits

A Mecha suit's occupancy is a single person whose size is the same as that of the suit. Thus, if the suit is Human Size, it is usable with a medium-sized occupant. A suit has no cargo capacity. Suits have no MP Cost for it's wearer.

## Step 6: Mecha Modules

Mecha Modules are separated into two categories - Design and Exotic. It is not compulsory to choose from each and

is dependent on the Mecha concept. The GM may rule out some Mecha Modules as not belonging to the Campaign Reality. These modules can also be described as **Monster Traits**.

## ***Mecha Modules: Design***

These are innate gadgets and other capabilities that a mecha may possess to complete the Mecha Concept from Step 1. They are all optional — no mecha is required to have any of the design modules described in this section.

### **Accessories**

These are additional features for the mecha, which provide useful but mundane non-combat-related advantages.

Examples of Accessories include: airlock, burglar alarm, camera, cell phone, emergency lights and siren, equipment locker (100kg), loudspeaker, luxurious decor, personal computer, revolving license plate, stereo system, tow cable, or wet bar. Descriptions of some accessories can be found in the **Vehicle Section** of the **ASSEMBLER CORE**.

Mecha need not acquire accessories that are implied by its other capabilities (a mecha with Space Travel can be assumed to have appropriate navigational systems) or which are ubiquitous (like safety belts in a modern vehicle).

**Mecha Point Cost:** 1 per Accessory.

### **Artificial Intellect (A.I.)**

The mecha is possessed of artificial intellect of some sort. There may be no reason to buy pilots or passengers in Step 4 depending on the mecha's concept. This Module also simulates Monster or animal intellect. See the mecha point cost for deriving a substitute INI attribute from the mecha's Intellect and Manoeuvrability attributes.

#### ***Limited Intelligence***

The mecha or creature can operate un-supervised, but has no self-initiative. It can be given orders or programmed with directives, but obeys in a slavish, unimaginative fashion or according to race memory. The mecha/animal has no emotions or desires. In short, it behaves much like a golem construct, and can even be considered one. Mecha or Creatures with limited A.I. will have Intellect, Presence and Reflex attributes, but its Presence cannot exceed 1.

#### ***Animal-like Intelligence***

The mecha or creature is capable of exercising (or at least simulating) self-initiative and creativity, but remains loyal to the character that owns it (unless it has the Hidden Program or Purpose Defect). Animal-like Mecha have Intellect, Presence, Willpower, Initiative, and Reflex attributes. Gigantic, organic vessels could also have an animal-like intelligence with skills such as navigation being a part of their 'natural' abilities. While the mecha intelligence can self operate using its own attributes instead of the Mecha Pilot Group, depending on the concept, a pilot may take over the controls and operate it independently using their own Pilot Group attributes.

**Intellect:** While the animal cannot be taught skills in the realm of technical training and comprehension (such as Engineering) this doesn't mean that an animal cannot have a moderate or even high INT score. An animal with a high INT score can represent an animal that is exceptionally alert. Even so, the highest INT that an animal should be given is 3. To reflect exceptional ability with a particular skill, the animal should receive an increased skill score and/or appropriate Advantages to increase the overall ability.

**Presence:** PRE represents the animal's "general personality, charm, charisma, and innate persuasiveness" as perceived by humans. Thus, an animal with a high PRE score would be considered an exceptionally attractive or, alternatively, fearsome specimen. Most animals will have a PRE score of 3 or less (few animals are more influential or fearsome to people than attractive or fear-inspiring humans).

**Willpower:** WIL represents the animal's "mental strength, ego, and force of conviction." Animals survive and interact largely by instinct rather than force of will, so most animals should never have a WIL score higher than 3. Some animals may have slightly higher scores, however, especially particularly stubborn critters.

#### ***Self Aware Artificial Intelligence***

The mecha or creature is capable of human-like thought processes, emotions and a notion of "Self." This option is useful for mecha created to be characters and not piloted craft. Also some character abilities and disabilities may apply to the character mecha or creature in addition to the design modules and defects. An example might be "Unlucky" or "Psychological Advantage." Mecha with full A.I. has Intellect (INT), Presence (PRE), Willpower (WIL), and derived A.I Initiative (INI) attributes. These attributes replace those of the pilot in game terms. These beings also use Action Points the same way as characters.

**Mecha Point Cost:** The Mecha Point cost is equal to the total of the Mind Group attribute scores multiplied by 10. Individually, the attribute scores may not exceed 10 without GM permission. Skills can also be purchased with Mecha Point costs that same as Skill Point costs (see Buying Skills [page 11](#)).

**A.I Initiative (INI):** The derived initiative replaces the attribute normally supplied by the pilot. The original derivation of (REF + INT) ÷ 2 is then added to the mecha's INI modifier from Step 3 ([page 122](#)) when engaged in combat.

### **Booster**

A Booster is any system that gives a mecha a temporary "kick" of speed. Types of Boosters include afterburners for aircraft, nitro-injection for cars, antimatter injection for starships, etc. Some giant robots have Boosters that represent various types of super-technology — "quantum flux engine," for example.

A Booster will only affect one type of movement (Aero, Hydro, Terrain, Burrowing or Space). Mecha can take different Boosters for different movement types, however. All penalties associated with "sprinting" movement apply to boosted speeds. Boosters provide an increase in sprint multiplier (e.g. ×4 is one level up from normal ×3 MOV sprint) for a short period of time (no more than the Mecha's STR score in minutes). Combined with the Swing-Wing design Module, the top speed can be maintained longer. Exception: a space flight Booster adds additional G of MOV/Space for a number of G-



Actions, just like realistic space flight; G-Actions may not exceed 600.

**Mecha Point Cost:** Each additional Boosted sprint modifier of Aero, Hydro or Terrain costs the original MOV/Type Attribute ÷ STR in MP cost (rounded down). For space flight (either realistic or dramatic), cost is the same as realistic space flight; just give the Booster a shorter number of G-Actions and a higher thrust. *For example, a mecha with an attribute of 40 MOV/Aero and STR of 10 would pay 8 mecha points to have a sprint modifier of ×5 MOV/Aero for the number of STR in turns (from 48kph “walking” to 240kph “sprinting”).*

## Burrowing

The Mecha is given a MOV/Burrowing attribute and can move earth and/or tunnel underground. Sprint speed assumes the mecha is going through sand or loosely packed earth. Tunneling through solid rock progress is at ½ MOV. The tunnel it leaves behind can be either permanent or collapse after it — specify which when the mecha is created.

**Mecha Point Cost:** The MOV/Burrowing attribute starts at 1 at no cost. To improve the burrowing movement up to the Mecha Manoeuvrability attribute costs 20 MP per 1 MOV/Burrowing attribute. Speeds above the Mecha Manoeuvrability attribute costs 30MP per additional MOV attribute.

## Creature - Styled Weaponry

The Mecha has one or more design Modules that emulate an animal's natural weapons, such as sharp teeth, claws, tentacles, etc. Natural weapons are normally possessed by animals, monsters, and similar Mecha, but could also represent technological capabilities that mimic abilities such as a powered armour with retractable claws. Strength bonuses apply to all damage

Possessing more than one such creature weapon gives the Mecha a wider variety of attack forms. The specific Mecha Combat skill for that mecha covers the use of this weaponry.

Hands, feet, a heavy tail, ordinary teeth, or hooves are not normally counted as Creature Weapons since they are (relatively) blunt; and thus inflict usual melee damage.

### Claws or Spikes

The Mecha possesses sharp talons or spikes on its fingers, paws, or feet. In addition to regular damage, the claws inflict 1d6 additional damage when used in melee combat.

### Fangs, Beak, or Mandibles

The Mecha has very sharp teeth, or alternatively, a beak or insect-like mandibles. This natural weapon inflicts only +2d6 damage above normal damage in melee combat, but a successful strike that penetrates Armour gives the Mecha the option to maintain a biting grip and continue to inflict equivalent damage in subsequent turns. These additional attacks are automatically successful, but the opponent can break the hold with a successful Strength attribute check. While the attacker is maintaining a biting grip, its ability to defend is impeded: the attacker cannot use weapons to defend, and suffers a -4 DEF penalty against any attack.

### Horns

These are large horns for butting or stabbing. Horns add 1d6 extra damage to normal damage in melee combat but are exceptionally effective if the Mecha charges into battle. If the Mecha wins Initiative against an opponent and has room for a running start, it can lower its head and charge. A successful attack will deliver normal attack damage, plus 2d6 (rather than the normal +2d6). If a charge fails to connect, the charging Mecha will be off balance and suffers a -2 penalty to its DEF for the remainder of the turn and a -4 Initiative roll penalty on the following combat turn.

### Spines

The Mecha is covered in nasty spikes, quills, or sharp scales. Anyone who wrestles with the Mecha automatically suffers 3d6 damage each turn. This damage is in addition to any attack damage delivered. During these struggles, the opponent's clothes will also be ripped and shredded unless they are armoured.

### Tail Striker

If the Mecha has a combat-ready tail, it can be equipped with spikes, a stinger, or other similarly nasty weapon. The tail inflicts damage equivalent to half the Mecha's to normal STR damage plus any spikes that can be bought separately. Upon a successful attack, the target must make a Reflex attribute check or suffer a -4 Initiative penalty the following combat turn (the target is off balance). Buying Tail Striker twice enables the tail to inflict full mecha STR damage.

### Tentacles

One or more of the Mecha's limbs — or possibly its stylized “hair” — are actually tentacles. A Mecha with tentacles gains a +2 bonus when engaged in a wrestling attack and +2 DEF while defending against one. Tentacles are also difficult to avoid in combat (opponent suffers a -1 DEF penalty).

**Mecha Point Cost:** Each type of weapon designed into the mecha costs 1 MP if Medium or smaller, 2 MP if Large, 3 MP if Very Large, 4 MP if Huge, 5 MP if Gargantuan, 7MP is Immense. If the weapon is replicated on another limb then add 50% to the cost per extra limb (round down).

## Communications

Normally the pilot can still be heard from inside the mecha through some means (even if buried inside a 15m tall suit of armour). This basic speaker system does not cost any Points. Other possibilities include:

### Long Range Radio

This is usually a high-frequency system that has a long range but is vulnerable to jamming and interception. Taking advantage of the ionosphere's ability to mirror high-frequency signals, the high frequency (HF) band provides long-range communications (hundreds or thousands of kilometers) for low power. The down side is that these radio signals are easily



intercepted by other long-range radios in range. In space or worlds (like the moon) that lack an ionosphere, range is the same as a tactical radio (see below).

### **Tactical Radio**

This is a very high or ultra-high frequency communicator. It can be intercepted, but range is limited to line of sight transmissions (unless using relay towers), about 1-16 km in atmosphere (100 times that in space), which makes it much more secure beyond the immediate area.

### **Laser Comm.**

This tight-beam communicator is nearly impossible to jam or intercept without physically imposing something in the way. It is limited to line of sight transmission and is vulnerable to atmospheric effects. Maximum range is usually limited to about 8 km on the ground due to the horizon, but if there is a clear line of sight it is about 50 km in atmosphere (1,000 times that in space).

### **Microwave Comm.**

A microwave uplink is often used for communication with orbiting relay satellites or spaceships, or space-to-space communications. Treat as laser communication, but double range in atmosphere. The beam is also wider: anyone in its path (or within a few degrees to either side) with a microwave comm. can eavesdrop.

### **Comm. Options**

The following communication options can be added to the base communications types:

#### **Interplanetary**

This system has much greater range; good for communications anywhere in a solar system. It is often used by spacecraft, etc. Apply this to long-range radio, microwave, or laser comm systems.

#### **Interstellar**

A faster-than-light communications system allows instantaneous communication over vast distances; it may not exist in some settings. Apply this option to a long range radio communicator for broadcast systems or "laser" or "microwave" for a directional signal. Range may be interstellar (usually no more than a few 100 light years, sometimes less), or galactic (anywhere in the galaxy).

#### **Scanner**

If taken with a tactical or long-range radio, this option can scan multiple frequencies to eavesdrop on other transmissions in range. This requires a TN 12 Operate Electronics (Warfare) check when used against a long range radio or TN 18 when used against a tactical radio.

#### **Secure**

The communicator is frequency-agile, uses unusual parts of the spectrum, and/or is encrypted, making it very hard to jam or intercept. Operate Electronics (Warfare) checks made against the system have their TNs increased by 3 per level (+3 at level 1, +6 at level 2, etc.).

**Mecha Point Cost:** 2 per system (10 if telepathic). Scanner adds 1 Point and Secure adds 2 Points (per system per level). Interplanetary is +10, interstellar is +50, and galactic is +70 (per system).

### **Composite-Laminate Armour**

The mecha is designed with composite-laminate armour (often called Chobham Armour after its place of invention). This armour type is particularly effective for defeating shaped-charge Armour-Penetrating attacks such as the high-explosive anti-tank (HEAT) warheads of most anti-tank missiles and light anti-tank rockets.

Composite-laminate Armour *doubles* the mecha's Armour against Armour-Penetrating explosives (weapons that have either the Blast or Armour-Penetrating qualities). This will also affect weapons from other Game System books (for example, the M72 LAW rocket) that use shaped-charge or HEAT-type warheads.

**Mecha Point Cost:** +1 per point of Armour Value the mecha has.

### **Countermeasures**

#### **Ladar Warning Receiver (LWR)**

LWR warns the crew if a Laser Designator or High-Res Laser Radar (Ladar) is tracking the mecha.

#### **Radar Warning Receiver (RWR)**

RWR warns the crew if mecha is being locked onto by radar, or being tracked by an active radar-homing missile.

#### **Electronic Emission Sensor (EES)**

This sensor will detect and precisely locate any operating radar within twice the radar's range (non-global radars only if they are pointing at the mecha), or half range if High-Res Radar. It also functions like a Radar Warning Receiver.

**Mecha Point Cost:** 2 per RWR or LWR; 10 for EES.

### **Ejection Seat/Life Pod**

This rocket-powered escape system allows the crew to eject from a damaged mecha. It is possible that not all crew will be equipped with them. They are not useable in mecha suits.

As a free action, the character sitting in an ejector seat may eject at any time. Any canopy or rooftop is blasted clear by explosive bolts, and the seat launched at least 30 m into the air by a rocket motor. If the user ejected in an atmosphere, on the next turn, the rocket motor stops and a parachute unfolds, carrying the occupant down to Earth. The ejectee may make a Pilot Skill check (TN 18) to guide the parachute to a specific place within 100m of the mech. If the occupant has no Pilot Skill, or fails, the GM randomly determines where he or she lands. Make a Reflex save (TN 12, or TN 15 if landing in woods, mountain, or urban areas; +5 TN if dropping from orbit) to avoid falling damage.

Life pods are equipped to keep a person alive for about 5 days, whether the pod is designed as a life-raft, survival

utility-harness, or space ejection pod. Life pods are not designed for combat therefore treat any hit by weapons fire as extremely life threatening.

Usually, the person seated in them controls the ejection seats, but some vehicles (for example, spy cars) may have seats that are controlled by the driver or another crewman. These may omit a parachute.

**Mecha Point Cost:** 3 per ejection seat, 4 per person for a Life Pod.

## Electromagnetic Armour

The mecha's Armour can generate a powerful electromagnetic field, disrupting the particle jet produced by Armour-Penetrating blast attacks such as shaped-charge warheads (see Chobham Armour for a definition of these weapons). This triples the mecha's Armour against such attacks.

Electromagnetic Armour also has some effect against ballistic weapons that have the Armour-Penetrating quality: add the mecha's HLT in additional Armour against such attacks.

The activation of the armour produces a transient electromagnetic pulse — some sensors may easily detect this.

This may not be combined with Explosive Reactive Armour or Chobham Armour.

**Mecha Point Cost:** +2 per point of Armour the mecha has.

## Electronic Counter-Measures (ECM)

The mecha is equipped with an electronic countermeasure jamming suite. ECM can be any of the following sub-types: Radar Jammer (jams radar sensors), Radio Jammer (affects communications) or Defensive Jammer (jams missile homing systems).

Assign each category of ECM system an equipment bonus from +1 to +9; this may vary by category. This is used when determining the TN and the Defense against Operate Electronics (Warfare) attempts.

### **Radar Jammer**

This adds to the TN of any attempt to spot a target with radar, and adds to the mecha's Defense against attempts to lock on with a radar homing or semi-active radar homing missile. This TN increase is reduced by 1 for every 150 m from the Jammer; in space, it is reduced by 1 for every 1.5 km distant. The jamming area will be detected, but not the mecha itself. It has no effect on Laser Radar.

### **Radio Jammer**

All radio signals are jammed within 300m (900ft) × TN bonus, or 10 times that area in space. At an extra cost, it may also jam FTL radio.

### **Defensive Missile Jammer**

This adds a circumstance bonus to the mecha's Defense against an attack or lock-on attempt made by any infra-red-homing missile.

**Mecha Point Cost:** 3 per +1 for Radar or Defensive Jammer, 2 per +1 for Radio Jammer (+20 if jams FTL radio).

## Energy Absorption

Any one type of energy (plasma, electrical, magic) is absorbed by the mecha, powering it. The mecha can use that power in various ways. The mecha takes half HIT damage from weapons of the absorbing energy type.

### **Feedback Aura**

The energy is released in a burst that affects everything within 1d6 meters of the mecha. All objects in the area of effect suffer the full amount of the damage absorbed.

### **Feedback Emitter**

The energy is fired through a specially constructed port, dealing half the amount of damage absorbed. The emitter fires the mecha's STR in meters.

### **Strength Amplification**

The mecha's Strength (or Strength Modifier for suits) is doubled for half the amount of damage absorbed in Turns.

### **Dissipation**

The double the mecha's A.V in energy damage is harmlessly dispersed through the mecha.

**Mecha Point Cost:** 30 MP for Aura, 15 MP for strength amplification, 15 MP for dissipation, 20 MP for Emitter, per type of energy. For extra Emitter range add +5 MP per 50 meters.

## Environmental Systems

### **Climate Control**

The mecha has Climate Controls that allow the crew to be comfortable in a wide variety of temperatures (such as Arctic to sweltering jungle). Beyond that, the mecha needs Life Support.

### **Nuclear-Biological-Chemical (NBC) Filter**

The mecha can filter gases, radioactive fallout, dust, and germs from external air, protecting its mechanisms and pilot much as if they had an environmental suit and gas mask. Includes Climate Control.

### **Life Support**

The mecha can operate in space, at high altitudes, underwater, or on a world without a breathable oxygen atmosphere. Any occupants have their own oxygen supply (lasts as long as the mecha operates). An NBC Filter is not needed, since the environment is completely airtight. Includes Climate Control. Mecha with the Orbital Velocity module do not require the extra purchase of Life Support.

**Mecha Point Cost:** For Climate Control: 1 if Medium or smaller, 2 if Large, 3 if Very Large, 4 if Huge, 5 if Gargantuan or Immense. Twice the cost for NBC filters and four times the cost for life support.

## Explosive Reactive Armour (ERA)

A layer of explosive tiles in metal trays protects the mecha's armour. If hit by an Armour-Penetrating blast attack (see Composite Armour) such as a shaped-charge warhead, one of the ERA tiles will detonate. This slams the metal plate

covering it into the path of the particle jet produced by the warhead, disrupting it and effectively negating the Armour-Penetrating quality of the attack (does no HIT damage to the Mecha)

Reactive Armour works on a roll of 3+ on 3d6. Each time it successfully detonates, however, add 1 to the TN, as the mecha gradually becomes vulnerable through the depletion of its Armour. Thus, the second time, it works on a 4+, and so on. When the Reactive Armour detonates, anyone within a 3m radius will take 5d6 damage as per an attack with the blast quality. This includes the mecha; as a result, Reactive Armour is rarely used on mecha with an Armour Value under 30. It takes the final Target Number in hours to replace a set of Reactive Armour.

**Mecha Point Cost:** 8 MP

---

### Extra Arms

A giant robot is assumed to have two arms, but it could have more (for example, a robot octopus). Vehicles can purchase an extra arm to simulate a Crane mechanism. Extra Arms can purchase more than the base mecha STR if the concept warrants it.

**Mecha Point Cost:** Each extra arm costs 1 per 2 points of Strength the mecha possesses (round down). For example, a mecha with STR 20 and three extra arms (a total of five arms) would pay 30 Mecha Points.

---

### Firing Ports

The mecha has one or more firing ports sufficient to let passengers fire out of the mecha with their own ranged weapons. The firing ports provide a Tiny Target Area (-6 Modifier, equivalent to arrow slits).

**Mecha Point Cost:** 1 per firing port

---

### Force Field

Some mecha possess Force Fields. A Force Field is different from Armour in that it can be battered down by a sufficiently powerful attack.

A Force Field can be up or down. When down it does not stop any damage. When up, it is often invisible (GM's option), but Meta-Scanners and possibly other sensors can usually detect it and "shields up" may be construed as hostile in some quarters. Force Field status must be set at the start of the mecha Operator's actions for the turn and cannot be changed until their action in the next turn.

A Force Field provides extra HITs that absorb damage if the mecha is hit. Decide how many HITs the field has. This must be at least 1 if Tiny and less, 3 if Very Small, 5 if Small, 10 HITs if Medium size, 20 if Large, 30 if Very Large, 40 if Huge, 50 if Gargantuan or 60 if Immense

Damage is first applied to the Force Field, before Armour is subtracted.

A Force Field can quickly recover if undisturbed. The field recovers 1 HIT per turn if a Medium size mecha or smaller, 2 HITs if Large, 3 HITs if Very Large, 4 HITs if Huge, 5 HITs if Gargantuan or 10 HITs if Immense. The field may not recover HITs in any turn it took damage, whether it is "up" or not.

#### **Ablative Armour**

Instead of some form of energy barrier, the force field could be construed as ablative armour designed as an extra level of protection. This armour plating is created with various construction methods from honey combing the plating or with other suitable high tech ways. This armour concept usually cannot regenerate but can be refit at a superficial or light level (see [page 180](#)) depending on the amount of damage to the armour and also the availability of materials.

#### **Limited Duration Force Field**

Some Force Fields can operate only for a brief time before running out of power or burning out. If the field is "up" for more than its HLT in Turns it has a TN 15 chance on 3d6 each turn after that of burning out or running out of power. This disables it until repaired or recharged (GM's option).

#### **Limited Protection Force Field**

Some Force Fields only protect against certain damage types. If the field can only protect against a single type of energy (for example, lasers, fire, etc.) or vs. fast-moving projectiles (ballistic damage type) it will be cheaper.

**Mecha Point Cost:** 3 per HIT Point the Force Field possesses, 2 per HIT Point if the Force Field is either limited duration or gives limited protection, or 1 per HIT if both or Ablative Armour.

---

### Gestalt Mecha Merging

Merging allows several mecha to combine into a single larger 'Gestalt' mecha. This can also represent a large craft that is not complete until smaller vehicles are attached, thereby completing some form of power link (or similar) which brings the Gestalt craft into full power mode.

#### **Designing the Gestalt.**

Three additional criteria apply to it:

1. The combined mecha must be able to carry all crew and passengers of the mecha that merged.
2. Its HITs must always equal the combined HITs of all the mecha that made it up.
3. Its size must be equal to or greater than the size of the mecha that made it up. Design the mecha so its size is appropriate to the number of mecha that merge into it and the HITs requirement.

Decide which one of the crew pilots the Gestalt. The primary pilot must still have the necessary mecha skills to pilot the Gestalt version. The Mecha Combat skill involved with managing the additional systems warrants training in this field of mecha piloting. Other crew members may fire individual weapons (if the mecha has more than one) or run other equipment — who operates what should be specified when the mecha is designed. *For Example, in one campaign an Fighter Alpha can interlock with a Delta fighter to constitute an Omega Robot. The Gestalt pilot must be skilled in aerospace mecha and ground mecha. In this case the Delta Pilot is the Gestalt Pilot who manoeuvres Omega Robot and the Alpha Pilot is her WSO taking control of the ECM and Communication.*

The Gestalt mecha cannot be combined if any component mecha are reduced to 0 or fewer HITs. If damaged mecha merge together, some damage carries over: the HITs of the combined mecha is based on their total remaining HITs.

If a merged mecha separates, determine the total damage taken while merged and divide that total by the number of component mecha. Each component mecha bears the resulting HIT Point damage. Exceptions to this could be a concerted effort to target a component mecha while merged (e.g. the mecha that makes up the "arm" of the merged mecha). Mecha damaged before merging naturally retain the damage after merging.

**Mecha Point Cost:** Merging costs each mecha a number of Points equal to the Point value of the mecha they combine to constitute, divided by 5 times the number of mecha forming it. The mecha they manifest must be assigned a Point total. *Example: Four mecha can combine to manifest a 1,000 Point mecha. It will cost each one of them 1,000 Points divided by 20 (5 × 4 mecha) — or 50 Mecha Points to have the capability to combine into that mecha.* Note: GMs may wish to limit the Point values of the larger mecha to avoid abuse of the system.

### Hangar (Giant Robot or Vehicle only)

Any portion of a mecha's cargo capacity can be designated as a hangar bay for storage of other (smaller) mecha. For example, if the mecha has a 200-ton cargo capacity, it might designate that 150-tons are devoted to its hangar bay. Use common sense in determining the maximum number of mecha that can fit in a bay of the specified capacity, based on their described size and mass.

Mecha can also be carried as ordinary cargo, but cannot be effectively launched into battle, refueled, etc. while in the cargo bay. It takes several actions (or possibly much longer) to unload carried mecha.

**Mecha Point Cost:** The hangar cost is equal to the largest size of mecha that can fit through the bay's opening: 1 if Fine, 3 if Tiny, 5 if Very Small, 10 if small, 15 if Medium, 20 if Large, 25 if Very Large, 30 if Huge, 50 if Gargantuan or 100 if Immense.

### Headlights or Searchlight

The mecha has either headlights equivalent to those of a modern automobile, allowing it to drive at night (range 150m), or a longer-ranged searchlight (1,500m).

**Mecha Point Cost:** 1 Point for headlights, 2 for searchlight.

### Jumping

The mecha can make very high, unaided vertical jumps, but not actually fly. It may use jets, powerful leg muscles, etc. The Mecha can jump its STR attribute in Meters/Yards multiplied by a jump modifier. Assign the mecha a jump multiplier that applies to the Mecha STR from ×1 to ×10. Bipedal or Animal Mecha without this module can dive, upwards or across, one half its STR score in meters.

Mecha receive a bonus of +3 to their DEF while jumping or diving. This bonus lasts until their next action. Taking the Jumping Module for a vehicle means there is some form of booster jet that launches it into the air for the jumping distance.

The pilot declares the spot (i.e., the target hex/area) where he wants to land and makes a Mecha Combat skill check. The base TN for the roll is equal to 12, plus the Jump Multiplier figure.

If the roll is successful, the mecha clears the distance and lands safely. If diving to avoid an area attack, a successful roll means the mecha avoids the attack altogether. A failed roll means the mecha was caught in the area of effect in mid leap, suffering normal damage or effect of the attack plus any applicable falling damage.

**Mecha Point Cost: Robots, Vehicles and Monsters** - For every Jump Multiplier bought, the size level cost is 1 if Very Small or smaller, 2 if Small, 3 if Medium size, 4 if Large, 5 if Very Large, 6 if Huge, 8 if Gargantuan or 10 if Immense. *Suits* double the MP cost to reflect the wearer's STR is included in the jump calculations.

*Example, a Huge Mecha with a STR 40 and Jump Multiplier of ×4 would pay 24MP to be able to jump STR×4 in meters or yards (160) in a single turn. The TN for the successful 160m jump is 12 + 4 = 16.*

### Laser Designator

A laser designator projects a modulated laser beam that is used to mark targets for laser-guided munitions. Range is 500m and it cannot designate through smoke. While the Laser Designator is trained on a target, the accompanying laser guided ordnance automatically hits. The designator must hold all actions and aim.

**Mecha Point Cost:** 2 per 500m of range.

### Launch Catapult

This system uses steam or an electromagnetic mass driver to accelerate aircraft or other mecha, boosting them to top speed. This allows fliers to take off in a much shorter distance. If launching into battle, the catapult also provides a +1 initiative bonus on the first turn of combat. In space combat, it adds 1,500m of speed on the first turn.

**Mecha Point Cost:** This is determined by the size of the catapult, which sets the maximum size of mecha that can be launched: 1 (Small or Smaller), 2 (Medium), 4 (Large), 8 (Very Large), 16 (Huge), 32 (Gargantuan) or 40 MP (Immense).

### Mach Booster

At supersonic and hypersonic speeds, a craft can do little else than fly in a straight line and manoeuvre as little as possible to prevent stress on the airframe. Rather than buying these MACH speeds in movement it is much cheaper to buy the Mach Booster Module.

The catch is the Mecha's reduction in the DEF at these speeds. For every Mach Number taken, the mecha is at -3 DEF. A Mach Boost's duration is the equivalent to the mecha's STR in minutes. At hypersonic speeds the mecha is little more than a missile as far as the pilot is concerned. The pilot cannot use these Mach speeds in combat situations (other than to hotfoot it out of there).

It takes 10 turns for each Mach speed to be achieved. But while the mecha is building up this speed it's DEF is still at the -3 penalty per target Mach Number.

If a lot of high-speed combat is envisioned, the mecha should instead have sufficient MOV/Aero and possibly the

Booster Module to be able to manoeuvre at these speeds. The mecha still gains the Speed and Range TN modifiers applied at the Mach velocity (see the Core Rules). However if a mecha paid the MOV points to fly at the same Mach speed as a target mecha using this Module, then the aggressor has a serious upper hand.

#### **Option- Occupant Damage**

The game master may allow the player to spend an action point to engage the Mach booster in combat as a last resort. This is highly dangerous, as the g-forces will pound the pilot's internal organs relentlessly. For every action the Mach Booster is engaged in combat every occupant in the mecha will take  $1d6 \times$  the Mach speed in LIF points directly but not suffer the Mach DEF penalty. This is a desperation option and purely a GM call.

**Mecha Point Cost:** 20 MP per extra Mach Number that the mecha wishes to achieve over their MOV/Aero top speed.

### **Mind-Interface System**

---

The mecha has a system that links the pilot's nervous system with its controls, enhancing its handling. When activated, a mind interface system provides a bonus to operating (skills), initiative, attack rolls, and to Reflex attribute checks.

This provides a +3 bonus if the mecha is a suit, +2 if a giant robot, or +1 if a vehicle.

There is a dark side, however. If the mecha takes damage, the feedback through the interface may shock the user. If the mecha is badly damaged (loses half or more of its HITS from a single attack) or is disabled by cumulative damage the Operator must make a HLT Attribute check (TN 15) or be stunned for 1d6 actions.

**Mecha Point Cost:** 10 Mecha Points.

### **Navigation Aids**

---

Appropriate basic navigation is free in most cases. Superior navigation capabilities are also available. Modifiers are not cumulative. Having accurate positional data is very useful for accurate indirect fire.

#### **Basic Navigation**

Maps, compass, lodestones, etc. +2 equipment bonus to Navigation Skill checks.

#### **Inertial Navigation System (INS)**

A gyroscopic system that provides a +3 equipment bonus to Navigation Skill checks.

#### **Global Positioning System (GPS)**

An advanced radio beacon system that uses a network of orbiting satellites with very accurate clocks to locate the mecha's position anywhere in the world. +4 equipment bonus on Navigation Skill checks, but requires the existence of a friendly satellite network (or some other system, depending on the campaign setting) — no bonus if such a network is unavailable.

**Mecha Point Cost:** 1 for basic navigation, 2 for INS, 2 for GPS.

### **Orbital Velocity**

---

Much like the Mach Booster Module except for the singular purpose of breaking the orbit of a planet. The mecha can achieve orbit once a day to simulate refueling or recharging. The DEF penalty is -12 while this Module is engaged and is limited to use outside combat roles. Mecha automatically have the Life Support Module incorporated into the cost and therefore does not need to be bought separately. The Mecha also has an automatic basic Space Movement equal to its Mecha Manoeuvrability attribute in meters/turn. Mecha that can break into orbit at will can automatically re-enter the atmosphere. The Re-entry Shield Module must be purchased if the Orbital Velocity is achieved via detachable booster.

**Mecha Point Cost:** 4 if Very Small or smaller, 8 if Small, 12 if Medium size, 20 if Large, 30 if Very Large, 40 if Huge, 50 if Gargantuan or 60 if Immense. Add 20 MP if the mecha can break orbit and re-enter at will without refueling. Halve the cost if module is a detachable Orbital booster.

### **Parachute or Re-entry Shield**

---

The mecha has a parachute that can be deployed (move action) to allow the mecha to "soft land" if air-dropped.

Re-entry Shield: The mecha also has a re-entry capsule or shield that allows the mecha to drop from orbit into a planetary atmosphere and land safely via parachute or flying. Make a Reflex save (TN 12, or TN 15 if landing in woods, mountain, or urban areas; +5 TN if dropping from orbit) to avoid falling damage.

**Mecha Point Cost:** 1 if Very Small or smaller, 2 if small, 3 if Medium, 4 if Large, 5 if Very Large, 6 if Huge, 10 if Gargantuan and 14 if Immense. Double the cost for a re-entry shield.

### **Reflective Coating**

---

The mecha's Armour is optimized to reflect laser beams. The coating *doubles* the mecha's Armour against any attack defined as inflicting laser-type damage. The reflective coating does make the mecha easy to spot visually or detect by radar, however — add an additional +1 to the Target Size modifier of the mecha when applied to rolls to spot or locate it.

**Mecha Point Cost:** +1 per point of Armour the mecha has.

### **Remote Control**

---

The mecha has some type of control mechanism that enables it to be operated by remote control. A remote control mecha is sometimes called a drone or remotely piloted vehicle (RPV).

#### **Basic Remote Control**

The mecha is controlled from outside the mecha by a radio (or other) control system by the owner. Doing so requires the Operator's full attention: he or she cannot do anything else, just as if actually inside the mecha piloting it. This also means the Operator can only run one mecha at once. It uses the Operator's stats as if he or she was aboard it. The control system must be specified as located in another mecha, a base, or a Hand-Held unit. The GM should decide what limitations (range, susceptibility to ECM, etc.) it has.

### **Advanced Remote Control**

As Basic Remote Control, but the mecha requires less supervision: the Operator can also do other things at the same time (including operating his or her own mecha, or controlling more than one advanced remote control mecha). If he or she divides his concentration in this way, the character suffers a cumulative -2 penalty on all actions for each mecha being remotely controlled.

If the mecha has a crew requirement, a team equal in size to that requirement must be used to control it.

**Mecha Point Cost:** 5 for Basic Remote Control, 10 for Advanced Remote Control.

### **Rooms (Vehicle Only)**

Gargantuan or Immense sized vehicles may have specialized internal rooms. These reduce occupancy as indicated.

#### **Kitchen**

Meals may be prepared aboard the mecha, providing room for two cooks to work (buy multiple kitchens for larger facilities). Counts as 3 occupants. 1 MP

#### **Conference Room**

Meetings are held in this room. Counts as a number of occupants equal to its capacity. 1 MP

#### **Science Lab**

This fully-equipped science lab gives a +2 Equipment bonus to any relevant scientific Skill check. Two scientists can work at a time; for larger facilities, buy multiple labs. Counts as 5 occupants. 5 MP

#### **Sick Bay**

A fully-equipped sick bay has surgical and diagnostic features and allows 2 people to be treated at a time. For hospital facilities, buy multiple sick bays. Counts as 5 occupants. 5 MP

#### **Workshop**

This fully-equipped machine shop includes a variety of specialized tools and spare parts. It grants a +3 equipment bonus on Repair checks for mechanical or, if technology allows, electronic, devices and lets character to make Craft (mechanical), (electronic), or (structural) checks without penalty. Counts as 5 occupants. 5 MP.

### **Self-Repair or Regeneration**

The mecha is capable of repairing itself. This can represent a self-healing bio-mechanical creature, an auto-repair system, or a good repair crew. Mecha cannot repair or regenerate if it is destroyed or suffers damage from an attack described in the mecha Defects - Wings, Windows, Weak Point or Susceptibility. Mecha cannot have both Self-Repair and Regeneration.

#### **Self-Repair**

The mecha can repair HITs every day of inactivity.

#### **Regeneration**

The mecha can regenerate HITs every Time Period, whether inactive or not. HITs that are part of a Force Field do not benefit from Regeneration or Self-Repair.

**Mecha Point Cost:** 20MP per HIT of Self-Repair if Fine, 15 if Tiny, 10 if Very Small, 8 if Small, 7 if Medium, 6 if Large, 5 if Very Large, 3 if Huge, 2 if Gargantuan size or 1 if Immense. Multiply the cost by 2 if the mecha regenerates HITs every hour, ×5 if every minute, ×10 if the mecha regenerates HITs every Turn. This means a Very Large mecha can spend 10 points for 2 HITs of Self Repair every day, 20 MP for 2 HITs of Regeneration every hour, 50 MP for 2 HITs/minute regenerated or 100 MP for 2 HITs regenerated every Turn.

### **Sensors**

Mecha may be equipped with various instruments and electronics to enhance their ability to detect objects at a distance.

Sensors are usually used to make Computer or Operate Electronics Skill checks to spot targets. Instead of the normal penalty of -1 per 3m, the penalty is -1 per 100 m times the range in km. Thus, a radar with a range of 10km allows Computer or Operate Electronics skill checks to be made at a penalty of only -1 per (100 times 10) 1000m (1km). This formula breaks down the range into increments with the maximum range being 10 increments.

A sensor noted as useful for targeting can be used when aiming attacks or navigating in the dark, bad weather, etc. This negates the effects of darkness or concealment through which the sensor can see. Not all sensors are useful for targeting.

Infra-red, Meta-Scanner, and Radar Sensors detect targets in a single direction — usually in a cone-shaped direction. A sensor can be specified as "global" (seeing in all directions) for double cost. Seismic and magnetic sensors are unaffected by solid objects and can "see" over the horizon; other sensors cannot scan through solid objects nor over the horizon. Sensors include:

#### **Infra-red (IR)**

The mecha has infra-red sensors like modern main battle tanks or attack helicopters. These give its crew the ability to see in the dark (in monochrome) as if it were day. Infra-red cannot see through solid objects. It can pick out heat shapes, see through ordinary darkness, smoke or fog, and detect people hiding in trees or bushes. It is useless underwater, but very effective in space. In space, range is 100 times greater. The sensor cannot see over the horizon. It can target opponents.

#### **Optics**

These are telescopes or electro-optical TV cameras. Unlike other sensors, they do not provide any ability to see through concealment, but simply increase the range at which objects can be visually spotted. Low-light optics are also available; these provide limited night vision capabilities (halving penalties for darkness only) but cannot see through smoke, vegetation, etc. They can be used for targeting.

#### **Radar**

The mecha bounces radio waves off objects and analyses the reflections to determine the range and direction of

targets. Radar lets the crew detect objects at long distances, but does not resolve color or fine detail: it only gives the approximate size, range, and course of the object detected. Radar is an active sensor, so it can be jammed or detected. It can see through darkness, fog, smoke, and vegetation; ignore concealment modifiers. In space, multiply range by 10. Radar can target opponents.

#### **Radar, High-Resolution or Ladar**

The mecha has either an advanced high-resolution radar or laser-based radar sensor that provides a detailed visual image of the target's surface. It won't reveal color, but will show texture and detail. Otherwise, treat as Radar, above.

#### **Meta-Scanner (MS)**

The mecha has sensors like a science fiction starship, or perhaps uses magic. It can work like a High-Res Radar or Infra-red Sensor or it can be set to detect life forms, metals, chemicals, or radiation sources. Meta-Scanners are often vulnerable to particular weather conditions, stellar storms, or radiation from local ore, and anything else the GM believes could interfere with them. They cannot scan through Force Fields, and their scanning radiation can be picked up by other Meta-Scanners at the same range, so another vessel will also always know when they're being scanned. In space, multiply range by 100 due to the absence of atmospheric interference. It can target opponents.

#### **Sonar**

The mecha has sonar sensors, similar to that used by a submarine or dolphin for detecting objects underwater. It may use passive sonar to "listen" for moving or noisy objects ("propeller noise at 6 o'clock — sounds like a Typhoon-class boat") or use active sonar to resolve the object's exact range and shape, or detect objects that aren't making noise, search the sea floor for wrecks, etc. If active sonar is used, passive sonar on other mecha can detect it at longer distances: add the range of the active sonar to their passive sonar detection range. Sonar does not work in space, and gets only 1% of its normal range if used in air. Active sonar can target opponents.

#### **Seismic**

This sensor can detect large moving objects by the vibration they produce in the ground. They are less precise than other sensors (-8 on rolls to spot targets) and cannot be used for targeting. Seismic sensors ignore concealment or intervening objects, but cannot detect stationary things (unless they produce vibrations, such as jumping up and down, drilling, etc.). Both the mecha and the object must be on the ground. Seismic sensors can provide an approximate size of the target (Medium, Large, etc.) but no actual information as to its shape or nature. They can detect large explosions and earthquakes at many times their base range. A seismic sensor is "global" automatically. It gains +5 to spot burrowing targets.

#### **Magnetic**

These sensors detect ferrous metal objects or objects with powerful magnetic fields, such as electromagnetic railguns or fusion power plants. They are less precise than other sensors (-8 to scan) and cannot be used for targeting. Like seismic sensors, they only give approximate mass, direction, and distance only, but can be unaffected by concealment or intervening objects. One of their main advantages is that they are unaffected by water.

**Mecha Point Cost:** 1 per km of range if optics; 2 per km of range if Low-Light Optics, Radar or Sonar; 3 per km if Infra-red or High-Res Radar/Laser; 5 per km if Meta-Scanner; 6 per km if Seismic or Magnetic Sensor. Global Sensors are ×2 cost; Seismic or Magnetic are Global at no extra cost.

### **Sensor Cloaking System**

The mecha can blend into the background using advanced technology to make itself virtually invisible. It is possible to attack while invisible, but moving through snow, rain, water, footprints, vegetation, etc. may reveal the mecha's approximate position.

Items dropped or put down by a cloaked mecha become visible; items picked up disappear if tucked into a recess or cargo section. However light never becomes invisible, although a source of light can become so (thus, the effect is that of a light with no visible source). Any part of an item that the subject carries but that extends more than 3 meters from it becomes visible.

Once the cloaked mecha gives away its general position (for example, by firing a gun, attacking with a sword, or blasting jets) it can be attacked. However there is a +4 TN penalty for attackers within melee range and +8 for attackers at a greater distance. Heightened Awareness and Heightened Senses can reduce this penalty. This penalty is halved if using a Blast or Emanating attack on the invisible character.

A robot or character can grope about to find an invisible mecha. A character can make a melee attack with his hands or a weapon within a 2m radius using a standard action. If an invisible target is in the designated area, there is a penalty of +4 to the melee attack's TN. If successful, the groping character deals no damage but has successfully pinpointed the invisible mecha's current location. (If the invisible mecha moves, its location, obviously, is once again unknown.)

While an invisible mecha strikes a character, the character struck knows the location of the mecha that struck him (until, of course, the invisible mecha moves). The only exception is if the invisible mecha has a reach greater than 2 meters. In this case, the assaulted character knows the general location of the mecha but has not pinpointed the exact location.

When a character tries to attack an invisible mecha whose location he has pinpointed, he attacks normally, but the invisible mecha still benefits from full concealment (and thus a penalty of TN +4). A particularly large and slow mecha might get a smaller miss chance (DEF penalties).

If a character tries to attack an invisible mecha whose location he has not pinpointed, have the player choose the hex or area where the character will direct the attack with the +8 TN Penalty. GM Note: If the invisible mecha is occupying that area, conduct the attack normally. If the enemy's not there, roll the miss chance as if it were there. Don't let the player see the result; just tell him that the character has missed. That way the player doesn't know whether the attack missed because the enemy's not there or because the GM successfully rolled the miss chance.

"Cloaking" devices are often vulnerable to damage, since they're on the surface of the mecha. The cloaking device will stop working if the mecha loses over 50% HITs.



### **Applicable Sensor Check to Detect Invisible Mecha**

Invisible Mecha is . . .	Target number
In combat	0
Moving at Slow speed	Mecha Pilot Skill
Moving at Tactical speed	Mecha Pilot Skill with -4 penalty
Moving at High Speed	Mecha Pilot Skill with -20 penalty
Some distance away	+1 per 10 feet
Behind an obstacle (door)	TN 5
Behind an obstacle (stone wall)	TN 15

**Mecha Point Cost:** 10 if Fine, 25 if Tiny, 50 if Very Small, 100 if Small, 150 if Medium, 200 if Large, 250 if Very Large, 300 if Huge, 500 if Gargantuan size or 600 if Immense. Add 10% to cost per sensor type (Radar, IR, etc) in addition to the default vision and optics cloak. Therefore, a complete sensor cloak would cost a Large Mecha 360MP (80% of 200 = 160MP). This mecha would not register on any standard multi-sensor screen (except possibly some form of Meta-scanner), however the limitations still apply with physical touch, smell and the environment that the mecha is moving in.

### **Sensory Jamming Field**

Mecha with a Jamming Field generator can cover an area (size is determined by the Level) with a field that partially blocks specific senses or detection techniques. This can represent a technological enhancement, or paranormal effect. Each time this Mecha Module is assigned, the mecha can either block one sense or enhanced sense (Type I) or one detection technique (Type II), which is determined during mecha creation. The GM may allow multiple assignments to the same sense or technique, which results in cumulative penalties. To fully block a detection technique, see the Invisibility Mecha Module. The pilot must use an action and the Mecha Combat skill to check against a TN of 14 to manipulate the field to a radius other than the current area of the field.

#### **Type I**

One of the five senses — hearing, smell, vision, taste, or touch — is partially blocked. This may mean that individuals within the area covered cannot see well (vision), cannot hear well (hearing), etc. Checks made by these individuals when pertaining to the specific senses suffer a +4 penalty to the TN, which is cumulative with any Heightened Senses bonus.

#### **Type II**

A detection technique is partially blocked. Examples of techniques include: natural night/dark vision, electric current detection; homing weapons; infravision; magnetic field detection; microscopic vision; radar detection; radio reception; sonar detection; a specific Sixth Sense technique; ultrasonic hearing; ultravision; vibration detection; X-ray vision. Module or Skill checks relating to these detection techniques suffer a +4 penalty to the TN.

**Mecha Point Cost:** 3 MP when the Sensor block covers up to 40m radius, 8 MP for a 300m radius, 12 MP jams a 2km radius, 16 MP if the Sensor block covers up to 8km radius, 20 MP when the Sensory block covers up to 40km radius and 24 MP covers up to 400km radius.

### **Shield**

A shield is a Hand-Held barrier that mecha can interpose to absorb damage from attacks. Mecha requires at least one arm in order to use a shield; if the mecha only has one arm, it can't use a Hand-Held weapon and a shield at the same time. The Mecha Combat skill can only be used with this module if it is a part of the mecha's standard piece of equipment. The Mecha Melee skill may allow the pilot bonuses depending on their personal skill in using shields. Use the Assembler Core for shields when using it offensively.

Mecha operator must make a successful Block Melee Attack. If successful, the shield's Armour provides protection from the attack.

**Mecha Point Cost:** 3 per 1 point of Armour. This additional Armour does not factor into the costs of other Modules or Attributes.

### **Special Mecha Movement**

This Module is appropriate for Mecha that may be of an exotic design that lets them perform unusual movement like running over water, etc. Depending on the amount of modules GMs may also develop a selection of other special movement abilities. The Mecha must have the MOV/Terrain attribute before taking this Module. Booster Modules do not work with special movement.

#### **Feline-Like**

The mecha will take half damage (round down) from most falls and always lands on its feet. Feline-like recovery from being knocked down due to damage requires a Mecha Combat roll against a TN 15.

#### **Dimension Hop**

Upon a successful Mecha Combat check against TN 12, the mecha can instantly travel between a designated dimension and back again while for a total distance equivalent to the mecha's Sprinting movement. Dimensions could include Asgard, Heaven, Hell, alternate Earth, the astral plane, etc. Each time this method is assigned, the mecha can travel to another single dimension. The GM will determine if Dimension Hop is appropriate for his or her campaign. This counts as two Special Movement Costs.

#### **Light-Footed**

The mecha can skim over sand, snow, or ice at full speed. Ignore Hex or Terrain penalties for the terrain chosen for this module.

### ***Slithering***

The mecha can slither along the ground at normal walking/running speeds. This module allows a mecha to move quickly while maintaining a very low profile (treat TNs as if head and shoulders visible)

### ***Swinging/Brachiating***

The mecha can swing through forests and cities (areas with natural or artificial structures above swinging height) using vines/ropes/webbing or simply its arms. Mecha, of a size level Very Large and higher, need to ensure that only Immense structures are used for swinging and that the cable used is capable of supporting their mass. For an additional 3 MP mecha produced cables/webs can be used in combat as whips, entanglement tools. For these webs/cables to do further combat damage create a weapon.

### ***Untraceable***

The mecha leaves footprints, tracks, or a scent that provides a +5 TN penalty to the tracking or shadowing skills of any hunters. Untraceable modules can be bought more than once.

### ***Wall-Bouncing***

The mecha can move at regular walking speed without touching the ground by bounding back and forth between nearby vertical surfaces (walls). For example, it can proceed down hallways or climb an alleyway between two buildings (bouncing from wall to wall). Much like swinging, the pilot must ensure that the structures can handle the size of the mecha.

### ***Wall-Crawling***

The mecha can cling to walls or ceilings as though they were on the ground or floor. The mecha can use spikes, adhesive pads, or some other means to climb walls and ceilings as if it were an insect. Climbing skills don't apply to this module and it counts as two Special Movement Costs.

### ***Water-Walking***

The mecha can walk (not run or sprint) over water as if it were land. This counts as two Special Movement Costs.

**Mecha Point Cost:** Each Special Movement Module costs 1 if Very Small or smaller, 2 if small, 3 if Medium, 4 if Large, 5 if Very Large, 6 if Huge, 8 if Gargantuan or 10 if an Immense size mecha.

## **Stabilization Gear**

The mecha's ranged weapons are gyro-stabilized. They can be fired when moving without penalty, even if the gunner lacks special skills. Exception: Weapons with the Static restriction can still only be fired when the mecha is stationary.

**Mecha Point Cost:** 10 Mecha Points.

## **Stealth**

The mecha is designed to be harder to detect via sensors, utilizing shapes, materials, or electronics to foil radar and other sensors. Stealth imposes a penalty to any checks to spot the mecha using non-visual sensors.

Stealth must be bought individually for Radar, Infra-red, Sonar, Seismic, or Meta-Scan Sensors.

**Mecha Point Cost:** Stealth costs 1 if Very Small or smaller, 2 if small, 3 if Medium, 4 if Large, 5 if Very Large, 6 if Huge, 8 if Gargantuan or 10 MP if an Immense sized mecha, per +1 TN on attempts to detect the mecha, per sensor class. The more expensive Sensor Cloak System Module should be bought if total invisibility from certain sensors is desired.

## **Summonable**

The mecha is linked to one special owner and can appear or disappear on command. Decide whether it normally appears beside the character or forms around him or her with the character inside. This Module is quite powerful, since it lets one bring a mecha into situations where dragging one along is normally unacceptable, like school, an embassy ball, or jail. There are two versions of Summonable:

### ***Summonable (Slow)***

The mecha takes several turns to summon (GM's option, or roll 2d6). The character can do nothing else — he or she may be concentrating, calling it, assembling it from smaller parts, etc.

### ***Summonable (Fast)***

The mecha takes only one action to summon.

### ***Summoning dependent on Objects***

Some summonable mecha have a special item that the character must have in order for the mecha to appear. The item may be the mecha in a more compact, but powerless shape, or a device that enables the mecha to be summoned from another dimension. Thus, a mecha can be prevented from appearing if the item is taken away. Typical summoning objects can include medallions or amulets, swords, items of clothing, bracers, rings, cubes, eggs, or even suitcases (with the mecha folded up inside).

**Mecha Point Cost:** 1 Fine, 5 Tiny, 10 Very Small, 15 Small, 30 for a Medium mecha, 45 for a Large mecha, 60 for a Very Large mecha, 75 for a Huge mecha, 90 for a Gargantuan mecha and 100 MP for an Immense sized mecha. +15 cost for Summonable (Fast). If the mecha requires a summonable object, note this in parenthesis; the cost is -15 Points.

## **Super-Modules**

The mecha has some item of equipment not otherwise defined that possesses special abilities that could have a significant effect on game balance. Examples of special equipment would be a "transporter" device that allows the crew members to be teleported great distances, a built-in magical laboratory, or doomsday bomb that, if activated, could destroy a city or even an entire planet. It is up to the GM to specify the abilities of special equipment, and to establish appropriate limitations given the game's scope and setting.

The Mecha Point Cost is up to the GM. Base it on how common the equipment is, how powerful it is relative to other systems, and how easily it is countered. For example, a space opera teleport chamber that followed conventions common to TV (range of about 40,000km, requires a radio beacon or similar device to "lock on to" when transporting someone back to the mecha, transports a half-dozen people at once, can't work through Force Fields, odd mineral concentrations, ion storms, etc.) might cost 1,000 MP if a rare advantage, or 200 MP if common enough that every ship has one.

**Mecha Point Cost:** Variable; see description

### Swing-Wing Design

Aerodynamic airframes can be fitted with mechanisms that allow a more streamlined design during high speeds allowing the time at maximum thrust to be achieved for longer. A Challenging (TN 18) mecha pilot roll is needed to successfully use the Swing-Wing when the mecha has sustained over 50% HITs damage. G.Ms may also rule some forms of mecha system failure will also negate any Swing-Wing bonuses at speed. Swing-Wing Design, Booster and/or Mach Booster Modules can be taken concurrently and only applies to Aero, Hydro, and FTL Movement. Mecha pilot skills are at -3 while the Swing-Wing is operational. While the swing-wing is functioning, any stall speed is doubled. While this Module is dependent on the mecha having a particular form of movement the Dependent Defect does not apply.

**Mecha Point Cost:** 40 points to double the duration of the mecha while at maximum Movement. This performance increase does not apply when the swing wing system cannot be enabled.

### Transformation

Certain mecha — often rare, expensive, or magical — have the capability to change shape. Some mecha can mechanically alter their shape or function. It is also possible for mecha to change between giant robot, vehicle, and suit types. For example, one might shift from a giant humanoid to jet fighter.

Decide on the number of different forms the mecha has. Buy the most expensive single configuration.

Each mode must be big enough for any occupants or cargo that the previous configuration contained. Otherwise, conservation of size and mass is realistic, but is certainly not a requirement (mecha may use super-science technologies to shunt extra mass into a pocket dimension, or use magic, to get around such physical limits).

It takes a mecha one action (and a full action) to transform from one configuration to another during which time its crew cannot take other actions. To do so faster, see Mechamorphosis Skills.

If a mecha has three or more forms, the designer must name each mode and specify a transform sequence. For example, if a mecha has a "walker," a "hybrid," and a "flier" mode, the sequence may be walker-hybrid-flier." The mecha can turn from hybrid into walker or flier, but not from flier to walker (or vice versa). Mecha with three or more forms can ignore this limitation and perform non-sequential transformation for an extra Mecha Point.

Mechamorphs are usually designed to mimic ordinary vehicles, and the two have much in common. There are, however, a few differences. When a mechamorph is in its vehicle alt form, he is both the vehicle and the pilot.

Vehicle alt forms are not treated as constructs, but do retain their mechamorph characteristics, abilities and immunities. Unlike ordinary vehicles, vehicle alt forms get to make savings throws.

Characters can morph into vehicle alt form and start their engines as a single move action. Each turn while in vehicle alt form, the character must use a move action to move. He may then also elect to take a standard action while piloting.

Like ordinary vehicles, mechamorphs in their vehicle alt forms can carry passengers. When a mechamorph is in a vehicle alt form, he may open and close his doors at will, allowing a potential passenger who makes a successful Acrobatics check (TN 12) to come aboard as a free action. Otherwise, a passenger must use a move action to enter a mechamorph's vehicle form.

A mechamorph may also choose to let a willing passenger become its pilot. A vehicle mechamorph with potential pilots must declare at the beginning of each turn whether it is piloting or is letting itself be piloted by a passenger. While being piloted, the passenger takes a move action each round to move the character's vehicle alt form. This leaves the mechamorph free to take its full actions for that round, including a full attack action.

**Mecha Point Cost:** Each extra configuration costs  $\frac{1}{5}$  what the fully built form would normally cost.

#### Example of Transformation

Mecha that has two forms: Air and Land. Each mode is designed independently. The Air mode turns out to cost 500 Mecha Points, while the Land mode costs only 403.

The mecha's cost is thus equal to the cost of the most expensive configuration — the Air mode — at 500 Points plus one fifth the cost of the other forms (round down) — in this case, the Land mode at  $403 \div 5 = 80.6$  Points. Total cost is thus  $500 + 80 = 580$  Points.

#### One-Way Transformation

The mecha cannot transform back to a prior configuration without considerable work at the hands of mechanics or lab technicians (taking a few hours time). For example, the original mecha might include a rocket booster to help it get to space, then it would "transform" into its more agile mode by ejecting the boosters. Another example is a robot that sheds its human-like skin and pops out various weapon pods.

If a transformation is one-way, it costs half as many Mecha Points (tenth of the cost of each extra mode).

### Mecha Modules: Exotic

Some mecha have exotic abilities that are the product of advanced super science or even magic. The GM may forbid some, or all, Exotic Modules, especially if the game is intended to have a more "realistic" or techno tone. Exotic Modules differ from Design Modules in that there are power levels involved. Depending on the Mecha Points spent, the Exotic power levels are increased in capability. This enables further progression at the cost of future character points. Don't hesitate to use other ACTION! SYSTEM sources or any other compatible descriptions of supernatural abilities and be sure to assign Mecha Point Costs in a balanced manner.

## Exotic Module Skill Rolls

The pilot controlling the mecha must be trained in its specific Mecha Combat skill to be able to control these Abilities. Therefore if an Alien army has a squad of “AV-56 Teleporting Insurgent Mecha”, their pilots would have the Mecha Combat (AV-56 Series) skill to use the Teleport advantage as an Exotic Mecha Module.

## PowASsemble! combined with MechASsemble!

The PowASsemble expansion will discuss how to replace the Exotic Modules described here with the mecha version of the meta-abilities listed in those rules.

## Combination Attack

---

**Mecha Point Cost:** 120 Points/Level

**Relevant Mecha Attribute:** None

**Progression:** The mecha can combine attacks with up to 2 other Mecha/Level

With training, individual Mecha can learn to combine their Special Attack Mecha Trait into awesome displays of power. In order to do this, all the Mecha must have both the Combination Attack Mecha Trait and the Special Attack Mecha Trait. The number of Mecha that can combine attacks at once is dependant on the Level of Combination Attack; a mecha can combine with up to 2 other Mecha for each Level. There is also an Defence cost associated with Combination Attack: an additional -2 to Mecha DEF per mecha involved in the attack. For example, if four Mecha are combining, they each have a -8 penalty to their DEF that turn.

The attack takes place on the Initiative of the mecha with the lowest Initiative and uses the mecha with the lowest attack modifier to determine if it hits. A single attack roll is made. The target has a defence penalty of -1 per mecha involved in the attack. If the attack succeeds, it inflicts x2 damage (for example, if two mecha combine, one with a 8d6 Special Attack and one with a 12d6 Special Attack, the total damage inflicted would be 4d6x10 — 20d6 doubled).

Note that Mecha with the Combination Attack Mecha Trait are not subject to the same restrictions as normal Mecha that perform a similar action.

## Contamination

---

**Mecha Point Cost:** 80 or 160 Points/Level

**Progression:** Descriptive; see below

This Mecha Trait represents the mecha’s ability to transform other mecha (or animals, or objects) into entities like itself. Frequently, this victim can then contaminate even more people. The method should be specified when the mecha is created. It might be similar to myths behind the vampire legend — the mecha’s blood carries a “plague” that, when ingested, mutates the person over a matter of hours or days. Alternatively, the mecha might lay an egg or seed (real or metaphorical) in the body of its prey, which will later hatch within the victim, killing him or her as a new monster is born. The mecha might even need to perform some special ritual that alters the victim. Whatever the case, the conditions under which the victim can become “contaminated” must be specified.

For 2 Points/Level, contamination is “difficult” — the victim must be willing, unconscious, or restrained for deliberate contagion to occur, or the target must perform an unusual activity (such as installing a contaminated component).

For 4 Points/Level contamination is “easy” — the contagion might be similar to a traditional werewolf attack, where a scratch or bite results in a victim becoming a werewolf. The GM can add special conditions, limitations, or effects to ensure that becoming contaminated is a curse and not a blessing.

The higher the level of Contamination, the faster the transformation occurs. There should always be some means of curing or delaying the eventual mutation, however. Possible cures include the destruction of the mecha that inflicted the contaminant, radical retrofitting, systems transfusion, or a successful mystical healing.

The GM will decide whether a player mecha which is contaminated remains in the player’s control or is reclassified as an NPC. Any retention (data, pilot control etc.) of the victim mecha’s former existence depends on the nature of the contamination and whether the victim has been “transformed,” “devoured,” or “reborn” in the process. Mecha which has been successfully contaminated will usually gain a certain number of Mecha Traits “paid for” with the Bonus Points acquired by assigning new mecha Defects (often including Cursed, Ism, Marked, Permanent, and Owned, the last one representing servitude to its new master). Usually the mutation will result in a monstrous manifestation similar to that of the mecha responsible. Thus, a spider alien that laid an egg in its victim may produce another spider alien, the victim of a vampire will grow fangs, etc. The GM should be wary of potentially undesirable possibilities such as a technovirus infected mecha infecting the entire group of Mecha, thereby creating an entire group of zombie-A.I mecha.

The Contamination Mecha Trait usually allows the creator or mother some measure of control over the newly transformed mecha. In these instances, the Level of Contamination is added as a favourable modifier to any Mind Control attempts performed against the subject.

A variation to Contamination inflicts the target with some sort of curse or disease, rather than transforming it into a different type of creature. Examples of these afflictions include rapid ageing, debilitating diseases, sensitivity to specific elements, etc.

Level 1	The transformation occurs over several months.
Level 2	The transformation occurs over several weeks.
Level 3	The transformation occurs over several days.
Level 4	The transformation occurs over several hours.
Level 5	The transformation occurs over several minutes.
Level 6	The transformation occurs over several actions.

## Elasticity

---

**Mecha Point Cost:** 80 Points/Level

**Relevant Mecha Attribute:** Health

**Progression:** Descriptive; see below

The mecha can stretch or contort its limbs and/or body to a superhuman degree. Increased Levels not only provide greater flexibility, but also the control over fine manipulation (such as using a stretched finger to move specific tumbling mechanisms on a key lock). At high Levels, Mecha can squeeze under doors and through small holes and cracks, as well as mimic crude shapes (an excellent way to represent a mecha who has a liquid-like appearance as well). While stretched, the mecha receives +1 Unarmed Attack/Defence (Grab/Bind) Skill bonuses for each Level of Elasticity. In animé, this is most appropriate for monsters (especially those with serpentine or tentacle limbs) or giant robots with extendible arms or even a large vehicular crane.

- Level 1 The mecha can stretch one body part up to 5x its regular dimensions and receives +1 to Unarmed Attack/Defence (Grab/Bind) Skill checks.
- Level 2 The mecha can stretch two body parts up to 5x their regular dimensions and receives +2 to Unarmed Attack/Defence (Grab/Bind) Skill checks.
- Level 3 The mecha can stretch three body parts up to 5x their regular dimensions and receives +3 to Unarmed Attack/Defence (Grab/Bind) Skill checks.
- Level 4 The mecha can stretch its entire body up to 5x its regular dimensions and receives +4 to Unarmed Attack/Defence (Grab/Bind) Skill checks.
- Level 5 The mecha can stretch its entire body up to 10x its regular dimensions and receives +5 to Unarmed Attack/Defence (Grab/Bind) Skill checks.
- Level 6 The mecha can stretch its entire body up to 20x its regular dimensions and receives +6 to Unarmed Attack/Defence (Grab/Bind) Skill checks.

## Environmental Control

**Mecha Point Cost:** 40-80 Points/Level

**Relevant Mecha Attribute:** Pilot's or A.I.'s Willpower

**Progression:** Descriptive; see below

The mecha can affect environmental conditions such as light, heat, darkness, or weather. This is most appropriate for Mecha with magical control over a particular element or facet of nature such as sorcerers, demons, and spirits, but it could also represent various technological devices. If a mecha concept is to perform multiple effects (for example, control light and darkness) the Mecha Trait can be acquired multiple times.

### Light

The mecha can illuminate an area with light as bright as a sunny day on Earth. Light control costs 1 Point/Level.

### Darkness

The mecha can summon smoke, fog, darkness, or the like to enshroud an area, blocking normal vision. Darkness control costs 80 Points/Level if the mecha can create total darkness that completely obscures light sources, or 40 Points/Level if the darkness is only partial.

### Silence

The mecha can block out sounds within the area of effect. It costs 40 Points/Level to create a barrier that prevents anyone outside from hearing sounds coming from within or vice versa, or 80 Points/Level to create a zone of silence where no sounds exists.

### Temperature

The mecha can alter temperatures in the area from Arctic cold to desert heat. If the mecha wishes to produce heat or cold sufficient to start fires or instantly freeze someone solid, the player should assign the Special Attack Mecha Trait instead. Temperature control costs 40 Point/Level if the mecha is limited to either increasing or decreasing temperature, or 80 Points/Level if it can do both.

### Weather

The mecha can alter the weather to create or still weather conditions of various sorts such as breezes, winds, rain, snow, fog, or storms. For weather that is reasonable for the local climate, the area affected depends on the mecha's Level. For weather that is abnormal (rain in a desert, snow in a hot summer) or violent (lightning storm, blizzard, hurricane), the mecha's Level is treated as one less for purposes of area affected or two less if both violent and abnormal. If this would reduce the Level below 1, the effect cannot be produced. For focused attacks, such as lightning bolts or tornadoes, use the Special Attack Mecha Trait instead. To produce precise effects or keep abnormal or violent weather under control, the GM may require a Willpower check with a penalty equal to the area Level (for example, -4 if affecting a regional area) and a bonus equal to the mecha's Mecha Trait Level (for example, +5 if the mecha has Level 5). It will often take several actions for weather to build up or disperse. Abnormal weather effects will return to normal soon after a mecha ceases to use this Mecha Trait. Weather control costs 80 Points/Level if general in nature, or 40 Point/Level if very specific (such as, "rain making").

Maintaining Environmental Control requires a slight amount of concentration: the mecha can perform other actions while doing so, but can only affect one area at any given time. The size of the environment the mecha can control is determined by the mecha's Level.

- Level 1 The mecha can affect a small area (like a room).
- Level 2 The mecha can affect a modest area (like a house).
- Level 3 The mecha can affect a local area (like a neighbourhood or village).
- Level 4 The mecha can affect a regional area (like an entire city).
- Level 5 The mecha can affect a large area (like an entire county).
- Level 6 The mecha can affect an entire region (like a state, province, or small country).

## Immunity

**Mecha Point Cost:** 400 Points/Level

**Relevant Mecha Attribute:** Health

**Progression:** Descriptive; see below

With this Mecha Trait, the mecha is completely immune to damage and adverse effects that stem from a particular weapon, element, application, or event. For example, a mecha with Level 1 Immunity to silver cannot be hurt by silver weapons and will not feel pain if clubbed with a sack of silver dollars. Similarly, a mecha with Level 4 Immunity to fire/heat could walk into the most intensive fire-storm possible and emerge unscathed.

- Level 1 The Immunity plays a small role in the game. Typical examples include: weapons made from a rare substance (such as gold, silver, or adamantite); attacks from a specific opponent (such as a brother, single animal type, or oneself); under specific conditions (such as in water, one hour during the day, or at home).
- Level 2 The Immunity plays a moderate role in the game. Typical examples include: weapons made from an uncommon substance (such as wood, bronze, or iron); attacks from a broad opponent group (such as demons, or animals); under broad conditions (such as during the night, on weekends, or in holy places).
- Level 3 The Immunity plays a large role in the game. Typical examples include: electricity; cold; a specific weapon type (such as daggers, arrows, or rapiers).
- Level 4 The Immunity plays a major role in the game. Typical examples include: fire/heat; a broad weapon type (such as swords or clubs); mental attacks.
- Level 5 The Immunity plays an extreme role in the game. Typical examples include: gunfire (including forms of artillery); bladed weapons; unarmed attacks.
- Level 6 The Immunity plays a primal role in the game. Typical examples include: weapons; energy; blunt trauma.

## Insubstantial

---

**Mecha Point Cost:** 120 Points/Level

**Progression:** Descriptive; see below

Each Level of this Mecha Trait reduces a mecha's density so much that he or she can pass through certain types of objects (including weapons) as though insubstantial. If a specific substance is not listed in Level progression, the GM should use the entry that it most closely resembles. The density of the human body, for example, falls approximately at Level 2 (water); consequently, a punch from an enemy would harmlessly pass through a mecha with Level 3 Insubstantial. Mecha with Level 6 Insubstantial are effectively incorporeal and can pass through virtually anything, including most forms of energy. If the mecha cannot switch off this Trait

- Level 1 The mecha can pass through paper and cloth.
- Level 2 The mecha can pass through wood and water.
- Level 3 The mecha can pass through concrete and earth.
- Level 4 The mecha can pass through iron and steel.
- Level 5 The mecha can pass through lead and gold .
- Level 6 The mecha can pass through energy.

## Massive Damage

---

**Mecha Point Cost:** 80 or 200 Points/Level

**Progression:** Damage the mecha delivers is increased by x2 per level.

Mecha with the Massive Damage Mecha Trait has incredible analysis systems that allow it to determine precisely how and where to hit any opponent in order to inflict incredible amounts of damage.

For 80 Points/Level, additional damage is only inflicted when the mecha uses one specific weapon type, Special Attack, or method of attack; this attack is defined during mecha creation. For example, it might represent a special talent with a weapon (such as guns, blades, blunt weapons), knowledge of a particular martial arts technique, or ability with a specific Special Attack.

For 200 Points/Level, this knowledge can be applied to all forms of physical combat including armed, unarmed, martial arts, and ranged weapons, as well as Special Attacks such as energy blasts, magical spells that inflict damage, or vehicle weapons.

Naturally, the mecha's attack must be successful to inflict any damage. Physical strength is not the key to delivering massive damage in an attack; the ability to sense a weakness is far more important. The capacity of Massive Damage to augment any kind of attack makes it a very useful Mecha Trait for a combat-oriented mecha.

## Mind Control

---

**Mecha Point Cost:** 120-240 Points/Level, 40 Points per +1 Mind Control TN, 80 Points per -1 Mind Control DEF (or when trying to break established contact).

**Relevant Mecha Attribute:** Pilot's or A.I.'s Willpower

**Progression:** Descriptive; see below

This Mecha Trait allows the mecha to mentally dominate other individuals. Sorcerers, some psionic adepts, and creatures with hypnotic Powers (such as many demons or vampires) are among those likely to have Mind Control. Mind Control can also be envisioned as a form of remote Machine Systems Control (choose one or buy twice if concept requires both).

Mind Control costs 240 Points/Level if it can be used on any human or mecha with an Intellect of 3 or higher (animals or pre-microchip machinery are excluded). It costs 200 Points/Level if it works on broad categories of humans or mecha ("any Japanese" or "any networked CPU," for example). It costs 160 Points/Level if the category is more specific and less useful ("Shinto priestesses" or "U.S Military Systems"). Finally, it costs 120 Points/Level if the category is very specific (members of a family, or mecha of a specific design). The effects of Mind Control should be role-played. If necessary, the GM can take over the character, although it is more fun if the player (with GM guidance) continues to play the pilot inside a controlled mecha.

Initiating Mind Control requires a full turn. The mecha or pilot must successfully make a Mecha Combat Skill check (if

attacking multiple targets, roll only once) against TN 12 plus the Intellect modifier of the target (use the highest modifier if targeting multiple people). If the check is successful, the target must make a WIL Attribute check against TN 12 plus the attacker's Willpower modifier plus the attacker's Mecha Combat skill. When controlling a large number of people, an average Will save for the entire group could be used. Mecha or pilot needs to defeat an opponent in Mind Combat to toy with the target's emotions (for example, giving the opponent new fears or a prejudice).

Once Mind Control is established, it remains in effect until the dominating mecha willingly relinquishes control, or until the target breaks free from the control. A target may attempt to break control under two circumstances: whenever he or she is given a command that conflicts with the nature of the mecha, and whenever the GM deems it appropriate for dramatic effect. To sever the connection, the target must make a successful WIL Attribute check against TN 12 plus the attacker's Intellect modifier and Mecha Combat Skill Level plus any Mind Control bonuses purchased with Mecha Points.

#### **Against Target's Nature**

If a Mind Controlled target is commanded to perform an action that he or she would not willingly do under normal circumstances, the target can attempt to break control. This only applies to A.I controlled mecha or software. Additionally, the target may receive a bonus if the action goes against his or her nature. The more distasteful the target finds the command, the greater the bonus. For mildly distasteful actions (such as licking an enemy's boots), no bonus is given. For highly distasteful or undesirable actions (such as stealing from an ally), a +4 bonus is given. Finally, for exceptionally distasteful or undesirable actions (such as attacking an ally), a +8 bonus is given. Note that these bonuses are cumulative with penalties associated with the controlling mecha's Mind Control Level.

#### **When the GM Deems Appropriate**

If the mecha commands his or her target to perform a number of mundane activities (clean the house, fetching a drink of water, etc.), the GM may decide the target does not receive an opportunity to break established control. Even a seemingly inoffensive command such as "sit in the closet" or "go to sleep," however, may have a drastic impact on the lives of others if a bomb is about to explode in the shrine or the target is piloting a mecha at the time. In these instances, the GM may give the target a chance to break free of the Mind Control even if the target does not regard a command as dangerous or distasteful (which would present an opportunity to end the control). This option puts the GM in direct control of the situation, which will benefit the campaign. Naturally, the GM can also apply modifiers to the save attempt that are cumulative with penalties associated with the controlling mecha's Mind Control bonuses to TN.

Mecha or pilot need not control every thought and action of his or her victims but can allow them to live normal lives until they are needed; these targets are known as "sleepers." Additionally, people who have been Mind Controlled will not usually remember events that occurred during the time period they are controlled and will have a gap in their memories.

The GM may allow a mecha or pilot to temporarily boost its Mind Control Mecha Trait by one or two Levels against a single individual who is its captive by "working" on the subject for a day or more. This bonus can represent concentrated brainwashing techniques or dedicated study of a subject.

Player characters should only be placed under Mind Control for extended periods of time in exceptional circumstances.

Level 1	The mecha can control the mind of 1 target for several minutes.
Level 2	The mecha can control the minds of 2-3 targets for several hours.
Level 3	The mecha can control the minds of 4-8 targets for several days.
Level 4	The mecha can control the minds of 9-15 targets several weeks.
Level 5	The mecha can control the minds of 16-25 targets of several months.
Level 6	The mecha can control the minds of 26-50 targets of several years.

### **Mind Shield**

**Mecha Point Cost:** 40 Point/Level

**Relevant Mecha Attribute:** Pilot's or A.I's Willpower

**Progression:** The mecha pilot gains a +2/Level for WIL Attribute checks involving mind invasion.

Mecha with Mind Shield is protected against psychic intrusion. This may be a reflection of design, a protective spell, special equipment, or some innate ability. Mecha with Mind Shield can detect and block attempts to read the pilot's mind by a character with Telepathy of equal or lower Level to the Mind Shield. The pilot may also add the twice the Level of Mind Shield to his or her Will save (as appropriate) when defending against a Mind Control attempt, telepathic Mind Combat, or a Special Attack with the Mind or Soul Attack Ability.

### **Pocket Dimension**

**Mecha Point Cost:** 80, 120 or 160 Points/Level

**Relevant Ability:** Pilot's Will

**Progression:** Descriptive; see below

This trait allows the opening of a hole or doorway — a portal — into another dimension. In anime, this power is sometimes possessed by demons or even vampires, or, in Western myth, by fairies. Mages often create dimensional portals leading from closets or doors into other places. In less serious games, Pocket Dimension can also represent the ability some mecha have to suddenly produce big items (like huge hammers or swords) seemingly out of nowhere. A Pocket Dimension could also represent an object that is simply bigger on the inside than on the outside.

The Level of Pocket Dimension determines the maximum size of the dimension. The environment and furnishings of the dimension are up to the player within the GM's limitations; extensive furnishings should be acquired as Personal Gear. A dimension could even be partially unexplored or dangerous territory, providing adventuring opportunities to the characters.

The cost of Pocket Dimension is 80 Points/Level if it is limited to a single fixed portal (such as a house closet), 120 Points/Level if the portal is in a mobile location (such as inside a vehicle, or attached to an item), or 160 Points/Level if the character can use a particular class of objects as a portal (such as "any mirror" or "any pool of water").

A character with this ability at 80 or 120 Points/Level cannot create new portals leading out of the dimension; he or



she may only leave by the one that was entered. A character can usually only have a single portal opened to his or her dimension at a time, but additional apertures to the same dimension may be possessed for 40 extra Character Points each. At the 160 Points/Level version, the character can leave the Pocket Dimension through any other appropriate exit within 1 mile times the Level (for example, within a 6 mile radius for Level 6); the character is not required to leave through the same one he or she entered.

Once opened, a portal can stay open for as long as the creator is in the dimension. The creator may also be able to "leave the door open" if he or she wishes to allow individuals to enter or leave while the creator is not present within the dimensional pocket.

Pocket Dimensions may optionally be designated as only one-way, restricting access in or out until the character or machine maintaining them is destroyed, or some other condition is fulfilled. This trait may be taken multiple times to give access to multiple different dimensions. If so, it may be taken at different Levels for each individual dimension.

### **Using Pocket Dimension Offensively**

Some mecha may have the exotic ability of being able to suck or warp unwilling targets into their alternate dimension (at the 120 or 160 Points/Level version only). To indicate this, assign the special attack Link(Pocket Dimension) to a Mecha weapon.

Mecha who have an ability to travel between dimensions should possess the *Dimension Hop* Special Movement trait.

Level 1	The dimension can be as large as a closet.
Level 2	The dimension can be as large as a room.
Level 3	The dimension can be as large as a house.
Level 4	The dimension can be as large as a city block.
Level 5	The dimension can be the size of an entire village.
Level 6	The dimension can be the size of an entire city (or even larger).

## **Projection**

**Mecha Point Cost:** 40 to 160 Points/Level

**Relevant Mecha Attribute:** Intellect

**Progression:** Descriptive; see below

The mecha can project images that fools one or more senses or sensors types. The Projection cannot be touched because it is not substantial. Closer inspection will usually reveal the Projection for what it is, which may cause it to disappear (GM's discretion). The GM may require a WIL attribute roll to "see through" a Projection against a TN equal to: 12 plus the projector's Willpower modifier plus the projector's Level in Mecha Combat.

A Projection may be of a particular object or entity, or of a complete scene (such as a furnished room or crowd). It may also be thrown over an existing person, scene, or object to make it appear different than it really is. A Projection that is untended is normally static, either remaining in one place or (if created over something) moving as the underlying object or entity moves. To give a Projection the semblance of independent activity (such as a projected image of a person who moves and speaks), the mecha must actively concentrate on manipulating the Projection, and perform no other actions.

For 40 Points/Level the mecha can create Projections that can be detected by one sense, usually sight (sense must be determined during mecha creation). For 80 Points/Level the Projections can be detected by two senses, usually sight and hearing.

For 120 Points/Level the Projections can be detected by three senses.

For 160 Points/Level the Projections can be detected by all senses. No matter how realistic the Projections, however, they can never cause physical sensations intense enough to inflict pain or damage. An image of a roaring fire may feel hot, and a mecha may believe that he or she is burning, but the fire cannot actually deliver damage. To create Projections capable of injuring targets, the mecha should possess a Special Attack Mecha Trait which is tied to the Illusion Mecha Trait through the Dependent Defect.

Mecha can normally maintain only a single Projection at a time. To be able to maintain multiple Projections at once costs the mecha an extra 40 Points for every distinct Projection the mecha can sustain simultaneously after the first. Thus, "Projection Level 3 (one sense, four Projections)" would cost 240 Points: 120 Points for Level 3 (one sense) and 120 more Points for being able to sustain four Projections at a time. The GM can assume that a group of objects or entities in close proximity, such as a furnished room, a swarm of insects, or a horde of charging warriors, counts as a single Projection rather than several. If a mecha is already sustaining its maximum number of Projections and wishes to create another one, an existing Projection must first be dispelled.

In order for the mecha to create a convincing Projections of something complex, the GM may require a Mecha Combat Skill check against an appropriate TN. The GM can adjust the TN depending on how familiar or unfamiliar the pilot is with the scene that is being simulated. The GM may also give the mecha a +1 bonus for every Level he or she has in excess of the minimum Level needed to create the Projection. For example, if a mecha with Projection Level 5 decides to create a merely human-sized Projection (which needs only Level 1), a +4 bonus applies. If the roll fails, the mecha's Projection has some subtle flaw in it; the mecha creating it may not be aware of this until someone else points it out, however.

Level 1	The mecha can an create small illusions, about the size of a single person.
Level 2	The mecha can create medium illusions, large enough for an entire room, or a large object like a car or elephant.
Level 3	The mecha can create large illusions that can cover a house-sized area.
Level 4	The mecha can create very large illusions that can cover an entire neighbourhood (or a few hundred square metres).
Level 5	The mecha can create Very Large illusions that cover a village-sized area.

## Sensory Block

**Mecha Point Cost:** 40 Points/Level

**Relevant Mecha Attribute:** Intellect

**Progression:** Descriptive; see below

Mecha with Sensory Block can cover an area (size is determined by the Level) with a field that partially blocks specific senses or detection techniques. This can represent a magical ability, technological enhancement, or paranormal effect. Each time this Mecha Trait is assigned, the mecha can either block one sense or enhanced sense (Type I) or one detection technique (Type II), which is determined during mecha creation. The GM may allow multiple assignments to the same sense or technique, which results in cumulative penalties. To fully block a detection technique, see the Invisibility Mecha Trait.

### Type I

One of the five senses — hearing, smell, vision, taste, or touch — is partially blocked. This may mean that individuals within the area covered cannot see well (vision), cannot hear well (hearing), etc. Checks made by these individuals when pertaining to the specific senses suffer a -4 penalty, which is cumulative with any Heightened Senses bonus.

### Type II

A detection technique is partially blocked. Examples of techniques include: natural night/dark vision, electric current detection; homing weapons; infravision; magnetic field detection; microscopic vision; radar detection; radio reception; sonar detection; a specific Sixth Sense technique; ultrasonic hearing; ultravision; vibration detection; X-ray vision. Ability or Skill checks relating to these detection techniques suffer a -4 penalty.

Level 1	The Sensory block covers up to 40m radius.
Level 2	The Sensory block covers up to 300m radius.
Level 3	The Sensory block covers up to 2km radius.
Level 4	The Sensory block covers up to 8km radius.
Level 5	The Sensory block covers up to 40km radius.
Level 6	The Sensory block covers up to 400km radius.

## Size Change

**Mecha Point Cost:** 40, 200, or 240 Points/Level

**Relevant Mecha Attribute:** Health

**Progression:** Descriptive; see below

This Mecha Trait reflects the ability to increase or decrease the stature of the mecha. Mecha may have the ability to both shrink and grow for 240 Points/Level. Alternatively, the mecha can choose to shrink only at a cost of 40 Points/Level or to grow only at a cost of 200 Points/Level; this restricts the mecha to changing size in one direction (with the ability to return to his or her normal size). For example, a mecha with Size Change (Shrinking Only) Level 2 could shrink to half size and once shrunk could grow back, but he or she could never increase his or her height beyond normal.

It takes one action for a mecha to change size. Size Change is normally designed to affect only the user, but it can be specified as usable on others instead. If so, it only affects a single willing subject, whom the user must touch. For it to be used as an attack against unwilling persons or over a distance, the mecha must also acquire the Special Attack Mecha Trait with the Linked (Size Change) Ability.

Level 1	The mecha's size can increase or decrease one size category (a Medium mecha can either grow to Large or shrink to Small).
Level 2	The mecha's size can increase or decrease two size categories (a Medium mecha can either grow to Very Large or shrink to Very Small).
Level 3	The mecha's size can increase or decrease three size categories (a Medium mecha can either grow to Huge or shrink to Tiny).
Level 4	The mecha's size can increase or decrease four size categories (a Medium mecha can either grow to Gargantuan or shrink to Fine).
Level 5	The mecha's size can increase or decrease five size categories (a Small mecha can grow to Gargantuan; a Large mecha could shrink to Fine).
Level 6	The mecha's size can increase or decrease six size categories (a Very Small mecha can grow to Gargantuan; a Very Large mecha could shrink to Fine).

See the **Appendix D** (page 218) for rules on scaling damage and attributes.

## Special Defence

**Mecha Point Cost:** 40 Points/Level

**Progression:** The mecha gains 1 Special Defence slot/Level

Mecha with this Mecha Trait is resistant or completely immune to a specific type of uncommon ailment or injury, normally one whose effects are otherwise insidious in nature. Special Defence can be acquired multiple times to represent a mecha who is resistant or immune to different kinds of attacks/events.

If a category is assigned one slot, the mecha is partially resistant; for two slots, the mecha has complete or enhanced resistance. Several examples of Special Defences and their effects are shown. The GM and players are encouraged to develop their own as well.

### Special Defence

Effect	1 Slot	2 Slots
Wear and Tear	Wears slowly	Does not wear
Air/Oxygen to function	Survive in low-oxygen environment	Doesn't require oxygen

Power Supply	Recharge once every 2-4 days	Never need to recharge.
One <i>Type</i> of Magic	+3 Defence & Mecha Trait checks	+6 Defence and checks
Ionisation	Unwanted disruption is reduced	No Disruption effects
Downtime	Downtime once every 3-7 days	No need to shut down
<i>Specific Attack Ability</i>	+3 Defence and Mecha Trait checks	+6 Defence and checks

## Swarm

**Mecha Point Cost:** 80 Points/Level

**Relevant Mecha Attribute:** Hazard Load Tolerance (HLT)

**Progression:** The mecha can transform into 1 critter/Level for every current HIT

Mecha with this Mecha Trait can transform into a swarm of small creatures: rats, bats, wasps, crows or other creatures or things (such as Very Small attack robots). animé vampires or demons most often possess this dramatic ability.

The type of swarm must be determined during mecha creation. The mecha can create one critter from its fuselage for every current HIT multiplied by the Level in this Mecha Trait. Thus, a mecha with 50 current HITs who has Swarm at Level 4 could transform into a mass of 200 creatures ( $50 \times 4 = 200$ ).

When transformed into a swarm, the mecha cannot use any of his or her existing Mecha Traits or Skills. The actions of the swarm are basically limited to three options: move, observe, and attack. Additionally, all the critters of the swarm must remain within close proximity of each other (within a radius of 10m per Level).

A swarm's Base Attack Bonus is equal to its Mecha Trait Level + 4. It inflicts 1 damage for every 10 critters (round up; minimum one damage) in the swarm. A swarm has zero Mecha HITs, but does not shut down as a normal mecha would. In many instances, the Armour and Force Field Mecha Traits will protect the target character from all damage, since the Mecha Traits stop sufficient damage from each critter attack. Each situation will be different; the GM must determine how much damage, if any, will penetrate the target's defences.

A swarm can be attacked normally, and each creature in it dies if it is hit (no Defence roll is allowed). Unless an opponent is using an attack with the Area Effect or Spreading Abilities, however, only a single member of the swarm can be killed per attack (GM's discretion). Consequently, a swarm of 200 creatures requires 200 attacks to be completely destroyed. Attacks with the Spreading Ability can affect multiple critters at time, while attacks with the Area Effect Ability can be devastating to the swarm.

The pilot of a mecha which dissolved into a swarm may choose to use an action to revert into normal appearance. To accomplish this, all available critters in the swarm (those not killed or trapped) must join together. Transforming back to normal configuration requires a pilot's action for that turn. The mecha will return to normal configuration with HITs equal to the number of critters that recombined divided by the Swarm Mecha Trait Level (round down). For example, if a mecha with 50 current HITs and Swarm at Level 4 divided into 200 creatures, and after a battle, recombined with only 130 available critters, the mecha would then have a current total of 32 HITs ( $130 \div 4 = 32$ ).

## Telekinesis

**Mecha Point Cost:** 40-80 Points/Level

**Relevant Mecha Attribute:** Intellect

**Progression:** Descriptive; see below

The mecha or pilot can concentrate on an object and move it without physically touching it. Telekinesis may represent psionic ability, magic, or some type of tractor beam. Characters with the ability to magically control a particular element (Earth, Water, etc.) may also use Telekinesis to represent their particular ability. This Mecha ability may also give the pilot psionic powers that he or she may not be able to channel outside the mecha. If a psychic pilot already has telekinetic abilities, then add the pilot's and mecha's Levels together provided the telekinetic powers are similarly restricted. If the mecha's telekinetic powers are quite different then the GM may decide to allow a partial upgrade to the pilot's abilities or none at all.

A character using Telekinesis can lift an object or group of adjacent objects and move it at walking speed (10m/turn) or manipulate it with the Reflex of a human hand. Telekinesis works over a close distance (up to about 3m) at full strength; effective strength declines by one Level if used within a short range (up to 12m), or by two Levels if used at medium range (up to 120m). Ranges multiply by 1,000 in space. The weight that a character can lift depends on his or her Level, as does the degree of fine motor control.

The character can also levitate an object (or group of objects) and have it strike another person as if it were a short-ranged thrown weapon. The weight Telekinesis can lift is reduced by a factor of 10 when throwing an object hard enough to inflict damage. For example, a character with Level 5 could lift up to 10 tons but could only throw objects weighing up to 1 ton. This is treated as a normal attack and thus can be negated by a successful defence roll. Damage depends on the weight of the object hurled: 2d6 damage for an object weighing up to 1kg, 4d6 damage for up to 10 kilograms, 8d6 damage for one up to 100kg, 12d6 damage for one up to one ton, and so on. The same damage applies to the object being hurled. If Telekinesis is used to directly crush or constrict a target, damage delivered equals 1d6 Points/Level.

A character who uses Telekinesis to grab another person and throw him or her uses the same procedure, but this requires a successful Mecha Combat: Telekinesis Skill check against a TN equal to the target's defence roll. Accurately tossing an opponent so that he or she hits another target requires a successful to hit roll. If attempting to disarm a character with Telekinesis, the subject should be allowed a Strength check against TN 12 + 1 per Telekinesis Level to retain the weapon. If a character wishes to fly at speed exceeding 10m/action, he or she needs Flight rather than Telekinesis.

Ordinary Telekinesis (capable of lifting anything physical, but not forms of energy) costs 4 Points/Level. At a cost of only 2 Point/Level, the character may have a more focused Telekinesis. This restricts the character to telekinetically moving (or sculpting) a particular type of matter. Some examples are provided.

## Air

The character can only move air (or other gases). A cubic metre of air weighs about 1.25kg.

## Earth

The character can only move dirt, rock, stone, sand, etc. He or she cannot affect treated metals. A cubic metre of packed dirt masses about 2 tons; the same mass of concrete weighs about 2.5 tons, while a cubic metre of solid granite weighs about 3 tons.

## Fire

The character can only affect flames of an existing fire, or can possibly start them with his or her mind as well (GM's discretion). Since fire does not have mass, the Level indicates the size of the flames that can be controlled and manipulated: small fires at Level 1 (like a candle or match flame), up to raging infernos that cover several city blocks at Level 6.

## Metal

The character's Telekinesis only works on metal. This may be a mystical limitation, or it may be the character's power is actually based on magnetic. A cubic yard of steel weighs about 8 tons.

## Water

The character can lift and move water. A cubic metre of water weights about a tonne. One litre of water weighs 1kg.

## Wood

The character's power only works on wood (living or dead). This ability is usually mystical in nature and common to nature priests and spirits. A cubic yard of wood weighs less than a ton.

### Telekinesis Levels

Level 1	The character can lift up to 1kg. (STR .06 <sup>MG</sup> )
Level 2	The character can lift up to 25kg. (STR 2)
Level 3	The character can lift up to 100kg. (STR 4).
Level 4	The character can lift up to 1200kg (STR 13).
Level 5	The character can lift up to 12.5 tons (STR 20).
Level 6	The character can lift up to 100 tons (STR 26).

## Telepathy

**Mecha Point Cost:** 40-120 Points/Level

**Relevant Mecha Attribute:** Intellect

**Progression:** Descriptive; see below

Telepathy is the classic psionic ability, and animé pilots with ESP will often possess it. Versions of telepathy may also represent other magical capabilities; demons who can tempt their victims often possess Telepathy, for example. This Mecha ability may give the pilot telepathic powers that he or she may not be able to channel outside the mecha. If a psychic pilot already has telepathic abilities, then add the pilot's and mecha's Levels together provided the telepathic powers are similarly restricted. If the mecha's telepathic powers are quite different then the GM may decide to allow a partial upgrade to the pilot's abilities or none at all.

Telepathy costs 1 Point/Level if its utility is quite restricted (for example, "only works with canines" or "only with close friends"). It costs 2 Points/Level if its utility is somewhat restricted (for example, "only with humans" or "only with beasts"). It costs 3 Points/Level if it has universal utility.

This Mecha Trait allows the pilot to read and transmit thoughts, and at higher Levels, to actually "invade" a person's mind and probe their memories or alter their thoughts. Telepathy normally works only if a subject is in sight, or can be otherwise perceived (touched, heard, etc.). If the subject is beyond normal perceptions, mental invasion is impossible, while transmitting thoughts, reading surface thoughts or sharing the subject's sensory impressions only works if that particular subject is someone the pilot is close to, such as a parent, sibling, long-term co-worker, close friend, or lover.

A subject cannot detect a telepath reading thoughts or sensory impressions unless he or she has the Telepathy or Mind Shield Mecha Trait at an equal or higher Level. If so, he or she can choose to block the telepath (or attempt to block it with the Mind Shield), in which case the only way to get through is via mental invasion. A subject will always be aware of a mental invasion (although a non-telepath may not understand exactly what is going on).

**Level 1** The pilot can, by concentrating, use mind reading to pick up the "loud" surface thoughts of a particular subject. A "loud" thought is something about which the subject is thinking hard or that has a very strong emotional content. The pilot can also transmit a single feeling, such as "fear" or "love" to another person.

**Level 2** The pilot can, by concentrating, use mind reading to pick up the ordinary surface thoughts of a particular subject. The pilot can only read what a person is actually thinking at the time. Two telepaths can communicate with one another at conversational speeds by reading each other's thoughts. The pilot can also transmit a word, simple image, or simple concept (like "flower" or a person's face) to a non-telepath on which he or she concentrates. It requires an entire action of concentration to convey one concept, which makes telepath to non-telepath communication slow.

**Level 3** The pilot can, by concentrating, pick up a single subject's surface thoughts and sensory impressions (i.e., see through a subject's eyes, feel what he or she feels, etc.). The pilot can choose to edit out some senses if desired. Alternatively, the pilot can concentrate and read "loud" surface thoughts from 2-6 people. The pilot can transmit sub-vocalised speech to a single non-telepath at normal conversational speeds or send a single powerful image or word to 2-6 people.

**Level 4** The pilot has the same capabilities as at Level 3 Telepathy. In addition, he or she can invade another person's mind. This counts as an attack, and if the subject is unwilling or unaware, the pilot will enter Mind Combat with him or her. If the subject is willing or loses the mental combat, the telepath can probe his or her memory for information he or she needs. The pilot will also instinctively read "loud" surface thoughts of anyone he or she touches (unless deliberately blocking the ability) without any need for concentration. The pilot can transmit thoughts at conversational speeds to 2-6 people at a time, simultaneously.

**Level 5** The pilot has the same capabilities as Level 4 Telepathy, except that he or she can read “loud” surface thoughts of anyone in the general vicinity without any need for concentration, unless deliberately blocking the ability. A successful mental invasion can even probe memories that the subject can no longer consciously remember. The pilot can transmit thoughts at conversational speeds to 7-20 people at a time, simultaneously.

**Level 6** The pilot has the same capabilities as Level 5 Telepathy. He or she automatically reads the surface thoughts of everyone in the vicinity and automatically shares the sensory experiences of anyone he or she is actually touching without any need for concentration, unless he or she deliberately tries to block this ability. The pilot can transmit thoughts at conversational speeds to 21-50 people at a time, simultaneously. If the pilot succeeds with a mental invasion, he or she may not only probe memories but may also alter them, deleting existing memories or giving the subject false ones.

## Teleport

**Mecha Point Cost:** 200 Points/Level

**Relevant Mecha Attribute:** Intellect

**Progression:** Descriptive; see below

Teleport enables the pilot to transport the mecha instantly from place to place without crossing the intervening space.

Teleporting is only possible if the pilot or mecha has visited the intended destination or can clearly see or otherwise determine the destination (possibly through Satellite imagery or detailed coordinates). The GM may allow pilots to teleport to unknown destinations (such as “100 metres up” or “to the other side of the door”), perhaps for an additional 40 or 80 pilot Points total. Accidentally teleporting into a solid object may be fatal or simply cause a failed teleport at the GM's option. Mecha can carry anything while teleporting that it could normally carry.

Teleporting is much quicker than any other means of travel (Flight, Space Flight, etc.), however, it is often risky. A Mecha Combat: Teleport Skill check against TN 15 should be required to perform a teleport beyond a “safe” distance. Failure means the pilot ends up in the wrong place (GM option) and his or her mecha “burns out” or “malfunctions” for hours or days.

When Teleport is first assigned, the GM may ask the player to decide if velocity (speed and direction) is conserved during travel. Alternatively, the pilot might adapt velocity to each Teleport individually. In many campaigns, the effects of velocity will simply be ignored.

**Level 1** The maximum teleportation distance is 2km, while the safe distance is 10m.

**Level 2** The maximum teleportation distance is 20km, while the safe distance is 100m.

**Level 3** The maximum teleportation distance is 2,000km, while the safe distance is 1km.

**Level 4** The maximum teleportation distance is 20,000km, while the safe distance is 10km.

**Level 5** The maximum teleportation distance is 200,000km, while the safe distance is 100km.

**Level 6** The maximum teleportation distance is 2,000,000km, while the safe distance is 1,000km.

## Unique Mecha Trait

**Mecha Point Cost:** 40-200 Points/Level

**Relevant Mecha Attribute:** Varies

**Progression:** Descriptive; see below

This Mecha Trait covers any abilities not detailed in the rules. Often a single Level is sufficient to give the character “flavour,” but more Points can be allocated to enhance the effects on game play and must be added if the Mecha Trait would be of considerable benefit. Discuss the Mecha Trait with the GM to determine what specific game effects the Mecha Trait possesses.

The GM should assign a Point cost per Level based on how the Mecha Trait compares to other Mecha Traits and how useful it is. In general, an Mecha Trait that is somewhat useful in the game should cost 1 Point/Level, one that is very useful should cost 2-3 Points/Level, and one that is extremely useful should cost 4-5 Points/Level (or more).

**Level 1** The Mecha Trait has little Mecha or game effect.

**Level 2** The Mecha Trait has a moderate Mecha or game effect.

**Level 3** The Mecha Trait has a large Mecha or game effect.

**Level 4** The Mecha Trait has a major Mecha or game effect.

**Level 5** The Mecha Trait has an extreme effect on the Mecha or game.

**Level 6** The Mecha Trait has a primal effect on the Mecha or game.

## Unknown Mecha Trait

**Mecha Point Cost:** Variable

**Relevant Mecha Attribute:** Variable

**Progression:** Variable

In some campaigns, the pilots may be unaware of their mecha's abilities until the traits manifest at crucial moments. To represent this, the player can allocate some Points to Unknown Mecha Trait when creating the character. The player does not purchase Levels in this Mecha Trait — he or she simply spends a selected amount of Character Points. The GM takes those Points and adds a bonus of 50% (rounding up) and uses them to assign other Mecha Traits to the character. The GM does not tell the player which Mecha Traits have been assigned; they are revealed to the player (and character) as the game unfolds and the traits manifest. GMs are encouraged to reveal the mecha's traits slowly and when it is appropriate for the campaign's story. The GM should never feel pressured to tell the player what are the mecha's Traits, that his or her character's is piloting, before the time is right.

## Step 7: Mecha Defects

These are Defects that affect the workings of the mecha. Defects reduce the Mecha Point Cost. Mecha Defects cannot reduce the Mecha Point Cost of a mecha below 1 Point. If this happens, treat the mecha as costing 1 Mecha Point.

### Alien Design

The mecha is of an alien design and is difficult to repair by those without an understanding of its design and construction.

The number of MP gained from this defect multiplies the Repair Time and Target Number for the mecha.

**Mecha Point Cost:** 2-5 MP.

### Antiquated

The mecha is an older model and has all of the problems that age would suggest.

There is a chance (Roll 3d6) at the start of any combat that the mecha will have a slight malfunction that decreases its effectiveness. This is something that cannot be repaired and the problem comes and goes without warning (check at the beginning of each combat).

**Mecha Point Cost:** See the table below for point costs depending on dice roll chance and effect of the problem. You may select only one dice roll chance but you may select multiple effects.

Chance of Malfunction (3d6)	MP Cost
Roll of 17 or higher	-5 MP
Roll of 14 or higher	-10 MP
Roll of 10 or higher	-20 MP
Roll of 8 or higher	-35 MP
Roll of 6 or higher	-50 MP

Effect of Malfunction	MP Cost
-1 modifier on all attack rolls	-2 MP
-3 modifier on all attack rolls	-3 MP
Speed decreased by 25%	-5 MP
One random exotic module stops working	-15 MP
Stress in armour, reduce HITs by 20%	-5 MP
Joints locking, REF attribute checks and DEF checks reduced by 3	-8 MP

### Dependent Module

**Linked to a Mecha Design or Exotic Module.** The mecha cannot use the chosen Mecha Module without first using a second (or more) Mecha Module. If the pilot fails to activate the dependent Mecha Module, he or she cannot use the other one either.

**Mecha Point Cost:** For every Module that the dependent Module needs to operate deduct 25% of the cost up to a maximum of 75% (round up). This means that a dependent module can only have a maximum of 3 Modules activated before it can operate. Examples of the Dependent Defect include: a mecha which can only fly after activating its Force Field (Flight dependent upon Force Field), a mecha which gains additional Armour when invisible (Electromagnetic Armour dependent upon Invisibility), a giant robot that can run much more quickly after stretching its legs and growing (Speed dependent upon Elasticity and Size Change), etc. The player must justify the Dependent Defect to the GM to avoid silly combinations.

### [Direction]-Optimized Armour

The Armour's full value protects against attacks from one direction (usually front-optimized). Attacks from other directions (for example, the side, rear, top, and bottom) are protected at 2/3 Armour (round down).

Explosive Reactive Armour can also be [direction]-optimized. If so, it only protects in the optimized direction. This defect cannot be taken more than once. Direction Susceptible HITs may be a better defect choice for vulnerability at a specific direction.

**Mecha Point Cost:** -1 per point of Armour Value the mecha has. If taken for Explosive Reactive Armour, this is worth -2 Points.

### [Direction]-Susceptible HITs

The full value of mecha HITs does not fully protect against attacks from one direction. Attacks from other directions (for example, the side, rear, top, and front) field the full amount of HITs. If this particular section sustains damage that reduces its HITs below zero then the entire mecha is disabled as per normal damage rules.

This defect lowers a section of the mecha's HITs to a level lower than the mecha's HITs attribute. This defect is useful for making mecha such as Tanks where the underbelly has usually the least protection. The section should not be a small area, as that defect should be covered by Weak Point. If, however, the mecha concept requires a very susceptible section that can't really be covered by a broad direction such as "Front" or "Side" then a fraction of the Mecha Point refund is available.

**Mecha Point Cost:** -1 per point of reduced HIT the section has. Game masters can opt to refund half, third or a quarter (round down) of the Mecha Points this Defect costs if the susceptible section is smaller.

### Easily Crippled

Once hit location is determined using the *Hit Location Table* on page 178, the attacker may still "move" the location. For every 1 point of effect number (instead of the usual 2), the attacker may move the hit location up or down one location

on the table (attacker's choice).

**Mecha Point Cost:** -6 MP.

### Exotic Power Source

The mecha requires a special type of fuel or power that cannot be easily found and/or is expensive. The exact nature and type of power will be completely dependent upon each individual campaign.

**Mecha Point Cost:** -10 MP, -15 MP if the mecha also has reduced endurance.

### Flammable

The mecha's structure and armour are made of wood or similar flammable material. Its Armour does not protect at all against fire, plasma, or other fire-based damage. Rolls against fire are made at a -4 penalty. See Fires.

**Mecha Point Cost:** -1 per point of Armour.

### Glider

Glider can be taken by a mecha that can fly and does not have the Hovercraft or Wind-Powered Defects. It means the mecha can only take off if launched from a fast-moving vehicle or high place, and can only gain speed by diving or gain altitude by riding thermals. Assume a glider has a glide ratio of about 20: 1 per Mecha REF. A 60: 1 glide ratio means (for example) that if dropped from a height of 1km, it could glide for 60km before landing. A pilot skill check (TN 12) can extend glide ratio by 10% for every point by which the check succeeded.

**Mecha Point Cost:** -2 per 10 MOV/Air.

### Hangar Queen

The mecha requires extra careful maintenance to work properly. If this is not available, the GM should feel free to impose breakdowns of various systems whenever seems dramatically appropriate. If a mecha is transformable, this Mecha Defect is only allowed if each mode possesses it.

The mecha spends much of its time in a garage, shop, port, etc. undergoing repairs. For every hour it was used, it should be given at least an hour of maintenance.

**Mecha Point Cost:** -10 MP

### Hidden Program or Purpose

This defect can only be taken for a mecha that has Artificial Intelligence. It means the mecha is programmed with loyalty to another person (or goal) that can, in some circumstances, result in it disobeying its owner if he or she opposes that person or goal. The mecha's owner is not necessarily aware of this programming or what will trigger it.

**Mecha Point Cost:** -1 × sum of mecha's ability scores if the program or purpose is likely to be rarely triggered; twice that if it is triggered fairly often (every two or three adventures).

### High Ground Pressure (HGP)

This Defect can only be taken if the mecha has a land speed. It means that the contact area of its wheels, legs, or tracks is slight compared to the mecha's weight. Consequently, it tends to sink into the ground. Most civilian cars and trucks possess this Defect while specialized all-terrain vehicles or dirt bikes do not have it. Most tanks do not have a high ground pressure due to the width of their tracks, but a "realistic" two-legged giant robot may have this problem unless it has Very Large feet.

The mecha will bog down in any swamp, deep snow, or mud (no movement). It moves at 1/2 speed when crossing sand, light snow, or soggy ground. This is cumulative with the penalties for Road Vehicle.

**Mecha Point Cost:** - 1 per MOV/Terrain Attribute

### Hovercraft

This Defect can only be taken if the mecha can fly. It means the mecha's ceiling is divided by 100 resulting in values usually no more than 3m above ground. Take this for hovercraft or floating ground-effect vehicles.

**Mecha Point Cost:** -5 MP

### Involuntary Change

The mecha may accidentally change from one form to the alternate state (or vice versa), or an external trigger (cold water, natural force, etc.) may induce the change. This Defect may represent a mecha prototype which hasn't had all the bugs ironed out in the transformation system.

This Defect is assigned once to indicate the mecha can accidentally change from normal to Alternate Form or from Alternate Form to normal form. The Defect is assigned twice if the character can transform both ways unintentionally. For example a Mecha with the Insubstantial Exotic Module could find itself accidentally turning solid with the involuntary change defect. Requires either Elasticity, Gestalt Merge, Invisibility, Insubstantial, Size Change, Swarm or Transformation.

**Mecha Point Cost:** -15 MP if it is difficult to trigger the Involuntary Change, -30 MP if moderately easy, -60 MP if the change is easy to trigger

### Module Reduction

**Linked to Module.** One of the mecha's design or exotic modules is limited greatly, resulting in a Reduction of its Mecha Point cost. This Defect offers a near-endless number of limitations, and consequently the player and GM should discuss the game ramifications and the new Module costs. This Defect is not usually appropriate for 1 MP Modules. A good example of this is the design choice of Mach Booster being only available above 10,000 meters (30,000ft) giving a half price reduction to the module.

**Mecha Point Cost:** The Module's MP cost can be halved, quartered or reduced to a tenth of it's original cost depending on the severity of the conditions of use.



## Naked Operator

One or more of the important crewmembers must be naked to pilot or crew the mecha. This Defect occurs surprisingly often in anime. The naked crewmember is usually floating in some sort of neural-interface tank, often with strategically placed electrodes or tubes connecting them to the mecha's life system. The disadvantage of this, aside from embarrassment, is the time it takes to get dressed before exiting the mecha.

**Mecha Point Cost:** -5 if one Operator must be naked. If two or more crewmembers must be naked, -10 MP.

## Noisy or Very Noisy

The mecha is noisier than an ordinary person. Mecha whose only type of movement is Space Travel or Star Drive may not be noisy. A noisy mecha is also detected more easily by sonar or Listen checks. A noisy mecha can never attempt to Move Silently.

"Noisy" means the mecha is as noisy as an ordinary automotive engine. +10 on Listen or sonar checks to notice it; weapons with the Sonar Homing quality get a +4 to lock on and attack.

"Very Noisy" means the mecha is as noisy as an aircraft engine. +18 on Listen or sonar checks to notice it; weapons with the Sonar Homing quality get a +8 to lock on and to attack.

**Mecha Point Cost:** -5 if noisy, or -10 if very noisy.

## One Hand/No Hand (Giant Robot only)

A giant robot is assumed to have two arms with hands, but it could have only one, or even none, instead having legs or no limbs at all. If it has one hand it cannot hold onto something at the same time it punches someone or uses a Hand-Held weapon. Vehicles can not take this Defect.

**Mecha Point Cost:** -1 per 2 points of Strength the mecha possesses if one hand, or -1 per point of Strength if it has no hands.

## Open

The mecha's Armour does not protect the crew or passengers, only the mecha itself. This is common for mecha like galleys, Jeeps, motorbikes, open-cockpit biplanes, speedboats, or robot horses. The mecha provides Half Body Cover, or no cover if the mecha is the same size or smaller than the rider.

**Mecha Point Cost:** -1 per point of Armour the mecha has.

## Poor Visibility

The mecha has very poor visibility, due to small or no windows and a lack of compensating sensors, or other problems. The only way to get unrestricted vision is to actually stick one's head out a hatch or window (leaving one with only half cover, as per the Open Defect). Otherwise, attempts to spot something visually from inside are at -2 if looking directly forward and -4 if looking in any other direction.

This is common for tanks. Mecha with the Open Defect should never have this Defect.

**Mecha Point Cost:** -5 MP

## Prone to Damage

When hit by any attack that causes damage the mecha use the damage effects for one level higher than what was inflicted.

Superficial becomes Light damage effects, Light damage becomes Serious, Serious damage becomes Critical effects, and Critical damage effects the mecha the same as Disabling damage.

Example: Mecha struck by an energy blast that inflicts the equivalent of superficial damage will suffer the effects of light damage. Instead of no attributes or skills being effected, Mecha-based skill rolls are at -1 until the pilot is able to affect field repairs.

**Mecha Point Cost:** -20 MP.

## Reduced Endurance

The default assumption is a mecha has an indefinite range — it can operate for months at a time, like a sailing ship or nuclear submarine, provided supplies of food and water are available. If the mecha must refuel or recharge before then (something that should take at least half an hour of effort) it has Reduced Endurance.

Select one of these operational periods: a few weeks, several days, a few days, several hours, a few hours, several minutes. In this context, "several" means 5d6, "a few" means 1d6.

**Mecha Point Cost:** -5 if a few weeks, -10 if several days, -15 if a few days, -20 if several hours, -25 if a few hours, -30 if several minutes.

## Restricted Path

For one reason or another, the mecha cannot leave a narrowly restricted area. This may represent a robot that is programmed to follow a specific guard route, a railway train, cable car that cannot leave its track, or a towed trailer/carriage.

Another way to interpret this is a mecha that is attached to a generator by a power cable. The mecha can operate normally unless the cable is unplugged, and then has only a few (1d6) actions reserve power (and an enemy mecha that grabs it might unplug it).

Decide if it is a long path (like a railway line) or a short path (like a tether or a building interior)

**Mecha Point Cost:** -1 Fine, -3 Tiny, -5 Very Small, -10 Small, -15 if Medium, -20 if Large, -25 if Very Large, -30 if Huge, -50 if Gargantuan or -100 if Immense. Double the refund if a short path.

## Road Vehicle (Vehicle Only)

Take this Defect for most wheeled vehicles. The mecha attains full land speed only on a smooth flat surface such as

a paved road. Its land speed is further cut in half in other circumstances, such as on a dirt road, off-road, etc. The vehicle Combat rules have road condition modifiers.

**Mecha Point Cost:** -1 per 2 Attributes of MOV/Terrain

## Service Crew

The mecha is large enough that it requires a crew of engineers, sailors, or other individuals to perform maintenance, man rigging, cook, etc. Their training and skills will depend on the technology of the mecha, and may range from carpenters to nuclear reactor engineers.

Service crews are in addition to any Operators (pilot, commander, equipment operators, or gunners). For weapon loaders, use the Crew-Served restriction instead. The mecha must have sufficient passenger occupancy to carry that many crew. If a mecha loses service crew it will not stop functioning (provided there is someone to pilot it), but it will not run smoothly.

For each 25% a mecha is under-crewed (round up), the GM can impose a -2 penalty on all mecha-related Skill checks rolls or pick a system (sensors, Force Fields, maintenance, a weapon) that has gone unmanned and thus cannot be used. A short, overworked crew is also more likely to make mistakes, leading to equipment breakdowns.

**Mecha Point Cost:** Depends on the Service Crew requirement: -2 if one crew member, -4 if two crew, -6 if 3-4 crew, -8 if 5-8 crew, -10 if 9-16 crew, -12 if 17-32 crew, -14 if 33-64 crew, and -16 if 65-128 crew, etc.

## Stall Speed

This can only be taken by a mecha that has a ceiling and MOV/Aero, or depth and MOV/Underwater Hydro. If the mecha has a stall speed, it must always fly faster than the stall speed to remain in controlled flight. If it does not, it will go out of control.

Ordinary aeroplanes will have a stall speed. Mecha that uses flapping wings may have a low stall speed or none at all if they can hover like a hummingbird. Other types of flying mecha (vertical-take-off aircraft that use thrust vectoring, helicopters, anti-gravity fliers, hovercraft) will not have a stall speed. Submersibles can take this defect with the condition of receiving Serious or higher Damage (MP refund is halved).

A typical stall speed is about 10-25% of air speed. Decide on the movement in MOV/Type that the mecha must be travelling to.

**Mecha Point Cost:** -1 per Attribute of Stalling MOV/Aero. -1 per 2 Attributes of MOV/Underwater Hydro.

## Start-Up Time

If the mecha is shut down, a character cannot just climb into it and blast off cold. For example, it might be a complicated powered armour suit that takes a few minutes to put on, a power plant that takes time to warm up, or a rocket that takes hours of preparation in order to be ready for launch. Start-Up Time should only be taken for mecha that have Reduced Endurance of a day or less, as the time is trivial if the mecha runs constantly. Mecha Suits usually always has at least one level of this defect (see Table: Start-up Time for Suits on [page 173](#)). Another use for this module is adding to the time taken to be able to initialize a module such as Transformation or Gestalt.

**Mecha Point Cost:** -2 if 1 minute (20 actions), -4 if 10 minutes, -8 if an hour, -16 if 4+ hours.

## Susceptibility

The mecha loses twice as many HIT points as normal from a particular attack form, which must fit with the mecha's concept. It might be something with appropriate mystic resonance, such as acid for golems or silver for werewolves. It could also reflect the mecha's nature such as a robot taking extra damage from water (as it causes short circuits), or an alien's weakness to weapons from his or her home planet. The GM must approve any Susceptible Defects. A mecha may have a Susceptible Defect to either a common, uncommon, or rare attack form (in the context of the campaign).

**Mecha Point Cost:** -10 MP if the attack form is rare. -20 MP for an uncommon attack form. -30 MP if the attack form is common.

## Trailer (Vehicle only)

The mecha needs an external source of propulsion to be able to achieve its MOV speed. Horse Drawn Carriages, Train wagons, and Road Container trailers are examples of vehicles needing to be hitched to another vehicle or animal in order to move. The only other method of moving trailers is via gravity and inertia (i.e. push downhill). Trailers are designed to be balanced in a way that minimal exertion is needed to get and keep them in motion. The "Drag" column for STR is used to determine the maximum load that a mecha can draw a trailer up to its maximum speed. Trailers with only 2 wheels (such as a horse drawn buggy) have a bonus to the design that effectively gives the pulling animal/vehicle a +2 to STR for the purpose of towing.

**Mecha Point Cost:** -1 if Large or smaller, -2 if Very Large, -3 if Huge, -5 if Gargantuan and -8 if Immense. An additional -2 if the braking system relies on being connected to the towing vehicle or there is no braking system.

## Unique Defect

This section covers any and all possible Defects that a mecha might possess but are not detailed in the rules. The boundaries and limitations of the Defect should be discussed with the GM.

**Mecha Point Cost:** -10 MP if the Defect occurs infrequently and/or has a slight effect, -20 MP when the Defect occurs frequently and/or has a moderate effect or -30 MP if the Defect occurs constantly and/or has a severe effect.

## Uses Energy

**Linked to Exotic Module.** Usually if an ASsembler Core character advantage is used as a Module in the creation of a mecha, any energy point usage is ignored. This Defect reinstates those energy conditions in the form of draining mecha REF. The more the mecha uses energy, the more vulnerable to getting hit due to system disruption. If the Module's energy use will deplete the mecha's REF at a rate too fast for comfort then the Extra Energy Module is recommended. In

this case, deduct the energy points from that Module first before deducting Mecha DEF.

**Mecha Point Cost:** -20 MP for every Module that uses the Energy Point cost mechanic.

### **Volatile**

Fuel, a boiler, or ammunition may explode if the mecha is disabled or destroyed. If the attack that disables or destroys the mecha dealt damage past its Armour equal to or greater than half its normal full HITs, the mecha will explode after 2d6 actions. This explosion deals 1d6 damage per full 5 HITs the mecha had when undamaged (minimum 2d6) to everyone within the mecha (Reflex save, TN 18, for half damage). Half that damage is inflicted to everyone and everything within a number of feet equal to the mecha's full HITs (or meters equal to one-third full HITs) of the blast (Reflex save, TN 15, for half damage).

**Mecha Point Cost:** -1 per full 5 HITs the mecha has.

### **Weak Point**

Due to a flaw in the design, there is a weak point in the mecha. If an attacker knows where it is (this may require study of enemy wreckage, espionage, sensor scans, etc.) an attack to that point is much more likely to cripple or destroy the mecha.

Critical damage strikes the weak point and ignores the mecha's Armour. If an attacker knows about the weak point, an attack made at an -8 penalty may deliberately target the weak point and ignore the mecha's Armour.

**Mecha Point Cost:** -1 per point of Armour the mecha has.

### **Windows**

The mecha has large windows (like a car or jet liner) or canopy that does not protect against attacks aimed through them. This may not be taken in conjunction with the Open Defect.

If a mecha's occupants are attacked, they can only claim "Head and Shoulders" cover. Occupants that lean out of windows (for example, to shoot) will get only one-half cover. An attack can deliberately target a window at -4 to hit, ignoring the vehicle's Armour.

**Mecha Point Cost:** -1 per point of Armour the mecha has, provided it has an Armour Value over 2 points. Otherwise, none.

### **Wind-Powered (Vehicle-Only)**

The mecha is a sailing craft, powered by the wind. Its top speed will never exceed the present velocity of the wind, and it cannot move against the wind (it can tack upwind, but cannot move directly against the direction from which the wind is blowing).

This is most appropriate for mecha with Water Speed, though wind-powered land or air vehicles are possible. It's usually inappropriate for mecha with top speeds over 50kph.

It can be used with Dramatic Drive for space sails; the exact effects depend on drive technology: for example, a light sail will have its acceleration decline with the square of distance from the sun (measured in multiples of Earth's average distance from the sun). This cannot be taken in conjunction with the Glider Defect.

**Mecha Point Cost:** -1 if Large or smaller, -2 if Very Large, -3 if Huge, -5 if Gargantuan, -8 if Immense.

### **Wings**

A craft that relies on wing surfaces to provide lift is susceptible to loss of control, range, and ceiling when damage occurs to those wings. Treat damage sustained penalties a step up from actual damage taken. For example a Seriously damaged craft would suffer the penalties of a Critically damaged craft. Once a mecha's wing has been destroyed the mecha must make an emergency landing or crash.

**Mecha Point Cost:** -10 if Large or smaller, -20 if Very Large, -30 if Huge, -50 if Gargantuan, -80 if Immense.

### **Optional: Exotic Defects**

There may be some ASsembler Core Disadvantages that suit the Game Master or Players concept for the mecha, vehicle or monster. An example for a lighter mood mecha game is "Guy or Girl Magnet." Our Hero's custom designed World Racing Car makes all the girls' hearts melt and depending on the level of disadvantage could swarm the car when not mobile.

### **ASsembler Core Disabilities**

None of the Disadvantages should directly affect the pilot of the mecha, only the mecha he or she is piloting. Monsters and Artificial intelligences may take disabilities that challenge their campaign predicaments such as "Ism" or "Inept Attack."

**Mecha Point Cost:** Multiply the Disadvantage's character point refund by 10. Therefore buying 3 CP of "Nemesis," giving the Mecha a Nemesis whom may actively try to harm the mecha or interferes frequently as well, would refund 30 Mecha Points. Players should use the Mecha Defects list first to see if there is a Mecha equivalent to the Disadvantage.

## **Step 8: Weapons Systems Design**

Mecha do not need to be armed, but may possess an array of impressive weapons.

A suit or giant robot's fists can inflict damage even if it has no weapons. Base damage is shown on the Strength table on [page 177](#). More potent attacks — including bite or claw attacks more potent than the existing Mecha Module— should be built using the mecha weapon creation rules.

If the mecha has multiple weapons, design each one individually. If the pilot can make multiple attacks, several weapons may be used each turn. The same holds true for multiple crewmembers aboard a mecha assigned as gunners. If you want one weapon to have multiple ammo choices, take the Selective Damage quality.

In MechASsemble, a “weapon” does not necessarily mean a single gun or missile. A set of multiple missiles on rails or pods is best treated as a single weapon (with several shots). A ship-of-the-line’s broadside of dozens of cannons facing in the same direction is best handled as 1-3 weapons with extra damage and qualities such as Volley.

Most mecha attacks inflict damage: refer to Damage, below, and assign the dice of damage. Some attacks do not deliver ordinary damage, but instead, have other effects such as Flare, Nerve Gas, Riot Gas, Smoke, or Tangle.

## Damage

Select the type and number of dice of damage inflicted, for example, 8d6 or 1d6×10. This determines the weapon's effectiveness and MP cost. Special Attacks don't apply damage normally and need special descriptions below.

## Damage Type

Note down the type of weapon damage inflicted. This is not only a descriptive section but also allows the players and GM to use the effects of this damage type in the game. GMs and Players may also wish to note some of the qualities of the weapon as special damage. Since any of the following damage types have all sorts of advantages and disadvantages, there is no cost associated with this descriptive decision. *For instance, an electrical attack could short out computer systems but have little effect to a carefully insulated opponent.* This also allows for an Immunity to be selected in the Exotic Mecha Modules section.

Group	Damage Types
Physical	Ballistic: Bullets, Rail Guns and other high-velocity projectiles
	Melee: Clubs, Maces and other STR based damage
Energy	Cold
	Electrical
	Fire/plasma
	Laser
	Sonic
Special	A.P (Armour Value Negated)
	Blast Attack (radius)
	Burning
	Cone (increment)
	Emanate (Radius)
	EMP
	Toxins

*Example, of Damage Type listing could be Cold/Emn (3m) meaning the damage is Cold based that emanates to a radius of 3 meters.*

## Rate of Fire

A weapon’s rate of fire (abbreviated “RoF”) indicates how often a ranged weapon may be fired and how many actions are expended each turn. A whole number indicates the maximum number of actions that may be fired per turn. A fraction indicates the number of turns required to reload the weapon between shots (e.g., “1/3” means the weapon can be fired once every three turns). More than one number separated by a colon indicates the weapon is capable of multiple rates of fire (e.g., 3: 20 indicates the weapon is capable of firing either 3 shots per turn or 20 shots per turn). In such cases the player selects which rate of fire to use at the beginning of his character’s action.

A weapon is presumed to be Semi-Automatic if qualities or restrictions are not purchased to alter the weapon’s Rate of Fire. A semi-automatic (S) weapon fires one shot per attack (effectively acting as a single shot weapon). Some situations, however, allow characters armed with semi-automatic weapons to fire shots in rapid successions, getting in more than one shot per attack (albeit at a much reduced chance of hitting)

## Maximum Range

Maximum effective range (abbreviated “Max”) is the maximum range at which a ranged weapon, such as a bow or firearm, can reasonably hit a target at which it is aimed. If the attack inflicts damage, the range base range is shown on the table for the weapon’s die type. If the player wishes to create a weapon damage selected from two different dice increments like 11d6 (5d6 + 6d6) then the range increments are also added. For example, 11d6 has an increment of 150m + 200m = 350m. Pick the best maximum range for the combination of dice. (12d6 could be made up of 10d6 + 2d6 = 370m OR 6d6 + 6d6 = 400m). A weapon’s base range is 150m for a special attack. G.Ms may overrule the range selection depending on the weapon or campaign type.

### Range Increments

A range increment is 10% of the maximum range. Some mechanics of sensors and weapons rules are based on the increment and not the maximum range achievable by the weapon. So the Range increment of a weapon doing 12d6 would be 10% of 400m = 40m

## Damage Dice and Ranges

Damage Dice	Range	
Increments	(m or yd)	MP Cost
+1	10	1
+2	20	2
1d6	30	3
2d6	70	5
3d6	90	7

4d6	120	9
5d6	150	11
6d6	200	14
10d6 or 1d6×10	300	22
Special Weaponry	150	See Descriptions
Guided Missiles	3 km (2 miles)	See Description

Taking weapon qualities or restrictions can modify the maximum range. Each level of Extended Range will double the previous range; each level of Short Range will halve it.

Example: a Tank has a 120mm gun with 2d6×10 damage; this gives a maximum range of  $2 \times 300 = 600\text{m}$ . In the real world, a 120mm gun can reliably strike targets out to about 4,000m. Three selections of Extended Range qualities would take the total maximum allowable range to 4800m ( $600 \times 2 = 1200 \times 2 = 2400 \times 2 = 4800$  or  $600 \times 2^3$ ).

#### **Conversion Notes: Modifying Weapon Ranges**

Ranges in MechASsemble are based on the assumption that a powerful attack will usually travel farther. They can be modified in flexible fashion by taking appropriate qualities and limitations.

Some games, however, may have ranges that are unusually high or low across the board — perhaps as a game-balance device to balance them against melee or archaic weapons. If this seems like a good idea, the GM should apply a constant multiple to all ranges to suit your own preferred campaign realism — for example, arbitrarily dividing or multiplying all ranges by 2, 4, 8, or 10.

### **Range Modifier (Rmod)**

The Range Modifier reflects the inherent accuracy of the weapon at longer ranges. The Range Modifier (abbreviated “Rmod”) is a bonus useable only to offset or cancel negative modifiers due to range. For example, a Range Modifier of +2 means that a character using the weapon treats a –4 penalty for distance as only a –2 penalty. A weapon’s Range Modifier may not decrease modifiers for distance below 0. The Extended Range quality and Short Range restriction have Rmod modifiers.

### **Accuracy (Acc)**

Accuracy reflects the inherent accuracy of the weapon. The Accuracy modifier (abbreviated “Acc”) is added to the pilot’s skill roll (not the TN) when using the weapon.

### **Ammunition (Amm)**

A weapon has an ammo capacity (magazine) of 17-30 shots before running out of projectiles or power. This may be modified via the Extra Ammo quality or the Low Ammo restriction.

### **Mecha Point Cost**

If the attack delivers damage, determine the cost shown for the chosen dice size on the Damage Dice and Ranges Chart above.

Example: A missile could inflict 9d6 damage (giving a base 270m range). The best-cost breakdown of 9d6 is 4d6 + 5d6 = 20 Mecha Points. Qualities and Restrictions will alter the cost of the weapon (see page 158).

If a special attack, the cost is described individually. Thus a +5 tangle attack costs  $(10 + 5) \times 2 = 30$  Mecha Points.

Alternate Weapons cost a tenth of normal, see the Multiple Weapons section on page 155).

### **Multiple Weapons on a Mecha**

A single Operator on a mecha can only attack with a single weapon at a time, no matter how many are built into a mecha. Exception: If he or she has multiple attacks, and uses a full attack action, these extra attacks can be made with the same weapon (unless it has a Single Shot or Slow-Firing Rate of Fire) or they may use a different Alternate Weapon (or Ammo).

### **Alternate Weapons (or Ammo)**

If the mecha’s Operator has access to multiple different attacks, each secondary weapon costs less. This is because he or she can only use one weapon per action. For a tenth (1/10) the original cost (round down; minimum 1 Point), a mecha can be given another weapon that is of the same or lower Point cost than the mecha’s first weapon. This can represent either a new weapon or the same one with alternate ammo.

### **Different Gunners**

Weapons are normally designed to be used by the mecha pilot. If the mecha has multiple Operators, however, some may have their own weapons, allowing each to fire. If a weapon is in this category, note it as requiring a “different gunner” and pay for it at full cost. After it is acquired, additional alternate weapons may also be bought for that extra gunner, at the reduced cost given above. Note: Two characters may not fire the same weapon in a action, however, even if using multiple attacks.

### **Hand-Held Weapons**

It is assumed that weapons are attached to the mecha, but they may, instead, be designated as Hand-Held. A Hand-Held weapon can be lost or grabbed by an enemy, and the mecha must have arms to hold it. Mecha can, however, swap Hand-Held weapons with other mecha. To do this both weapons must be the same size so that hand grips and such are compatible. Hand-held weapons can never be assigned to different gunners; the mecha pilot must fire them.

### **Multiple Attacks with Hand-Held Weapons**

The wearer of a suit or pilot of a giant robot may use the normal rules for multiple attacks with two weapons if his or



her mecha has a weapon in each hand.

## Weapon Stat Block

Record weapons in the following format:

**Name:** The weapon's name (player's choice). For example, "20mm railgun."

**Damage:** The dice of damage. *For example, 1d6×10.* If no damage, list any TN including modifier and other attributes of the special attack. *For example, Name: Nerve Gas, Damage: TN 21, DR 3 Spd 3*

**Type:** The type of weapon or damage inflicted.

**Acc:** Any accuracy modifiers from qualities or restrictions.

**Rmod:** Any modifier to the ranged target TN.

**Maximum Range (MAX):** The weapon range (as modified by qualities and restrictions). Use "-" if a melee weapon.

**Rate of Fire:** Record the rate of fire

**Amm:** List the weapon's ammunition capacity (as modified by qualities and restrictions). Use "-" if melee or unlimited shots. Use abbreviated attribute if powered by mecha attribute.

**Cost:** List the Mecha Point cost, so that the weapon can be swapped out for other weapons if desired.

**Notes:** List any qualities or restrictions, either in full or via footnotes. List qualities first, separated by commas, then a semi-colon, then restrictions. If a quality or restriction is taken multiple times, use 2, 3, etc. to indicate this. Example: Armour Penetrating, Extended Range 2; Low Ammo 3.

If the weapon has variable types of ammo that inflict differing damages, each setting should have its own line.

## Example Heavy Weapons

Weapon	Dmg	Type	Acc	Rmod	Max	RoF	Amm
.50 cal. MG	9d6	Ballistic	+2	+5	1000	20	100
Field cannon, small	12d6	Ballistic	+1	+3	1000	1/10	1
Field cannon, med.	15d6	Ballistic	+1	+3	1000	1/10	1
Field Gun, 155mm	18d6	Ballistic	+2	+5	22 km	1/4	1
Ship's gun, 16-in.	24d6	Ballistic	+3	+8	50 km	1/20	1
Flame-thrower	4d6	Burning	+2	+2	40	1	50
Grenade, frag.	6d6	EX	0	0	STR×5	1/2	—
Grenade, tear gas	6d6	EX	0	0	STR×5	1/2	—
Grenade, stun	6d6	EX	0	0	STR×5	1/2	—
M1 Rocket Launch.	10d6	Ballistic	+1	+3	110	1/5	1
M72A2 LAW	10d6	EX	+1	+2	350	1	—
Mortar, 81mm	12d6	EX	+1	+4	1000	1/2	1
Rocket-propelled grenade	10d6	EX	+1	+3	100	1/4	1

## Weapon Use Summary

- Any Weapon change, be it selecting a variable rate of fire, changing clips, takes one unimpeded action. Combat may drag a weapon change longer depending on circumstances.
- Two weapons in one. Building variable types of ammunition into a weapon means recreating the weapon with the differing damage effects. It costs one action to select the new damage type. But can be done while moving.
- Weapons cannot be changed or selected as an "extra action" in a Turn without the penalty being applied to a Mecha Combat roll TN 15.
- Moving Cautiously in mecha is equivalent to a character being prone. Terrain modifiers still may come into play while aiming however.
- Use the standard character weapons rules for aiming and movement.

## Special Weaponry

These weapons affect a target differently and usually non-lethally to a straight damage weapon. The mecha point cost can still be varied using the Weapon Quality and Restriction multipliers. Assign each special attack a modifier (usually 1 to 21) which applies to the Target Numbers (TN).

## Exotic Module Weapon Pod

This concept can be a little tricky yet extremely rewarding. The Mecha Module is built as a hand-held or otherwise removable device. This is much cheaper in Mecha Point Cost terms, however the danger always exists that the mecha could be disarmed! Simply choose the exotic module as per normal (and usually with the Game Master's permission) and the mecha point cost becomes the basis of the weapon cost which can be modified with qualities and restrictions. The Module automatically is reduced by at least 2/3 (divide by 1.5), as the hand-held quality is really a restriction in this case. Players should really weigh the bonus in mecha points against the possibility of losing their main weapon. G.Ms are then in the position of determining when (if ever) a replacement weapon is obtained or whether the character is just going to have to retrieve it the hard way. The pod's Armour Value and HITs are the same value as the parent Mecha's AV. Therefore a mecha with an AV of 11 will have a gun pod with an AV of 11 and total HITs of 11. Check out the Hit Location table (page 178) to see what damage modifier is used for a weapon pod hit. **Mecha Point Cost:** Varies with Exotic Mecha Module. Automatically gets the special Weapon Pod Restriction.

## Flare

If hit, or within the radius of a Blast-effect or Emanation-effect, the target may become blinded. Everyone looking in the direction of the flash when the attack strikes must make a HLT Attribute save with a TN of 15 plus the Flare modifier else be blinded for 2d6 actions. **Mecha Point Cost:** Flare TN Modifier + 10.

## Guided Missiles

The weapon fires a projectile that homes in on its target. The missile has its normal maximum range. On the turn the projectile is fired, the attacker must have previously achieved a missile lock. Each turn (on the missile's initiative) the missile moves toward the target, closing a distance equal to its missile speed. Before it reaches the target, the victim can opt to either shoot the missile down or evade the missile's TN with a 3d6 + REF + ECM roll. Other variables depend on the guidance system used. Pick one of these systems based on the guided missile combat description on page 191.

### Guidance Mode

Once a lock-on is achieved, launching the missile is a free attack action next turn. The missile is always considered to have the highest initiative for that Turn and the firing mecha is still required to roll initiative for its actions. Once a Lock is achieved and the pilot decides to fire, treat the missile and mecha as separate entities.

TN	Mode Example
18	Operator-Guided
15	Laser-Guided (add operator's skill during combat)
18	Semi-Active Radar Homing (SARH)
18	Infra-red Homing (IRH)
21	Radar Homing (ARH)
15	Sonar Homing (SH)
18	Emission Homing (EH)
21	Inertial Guided (IG) or Satellite Guided (SG)
24	Smart Missile Systems (SM)
Varies	Other Homing

### Missile Speed (Spd)

Speed (abbreviated "Spd") measures how quickly (in Turns) the missile will reach its target in an abstract manner. The default missile speed is 4.

Spd	Cost Multiplier
6	× 1/4
5	× 1/3
4	× 1/2
3	× 1
2	× 2
1	× 3

### Effect (Eff)

The Effect (abbreviated "Eff") represents the amount of damage or other effect caused by the missile. This is expressed as a Damage Rating (DR), which represents the number of d6's. The effects of DR are chosen as per the Weapon Damage Type step (see page 154). A DR10 can also be rolled as 1d6×10. Damage Effects can also be altered with Qualities and Restrictions.

### Lock Duration (Dur)

Duration is the total amount of times that a missile can acquire a target acquisition after it is fired at the victim. Every Duration above one, adds an additional attempt at locking onto a target before the missile's fuel runs out or it exits the combat arena.

**Mecha Point Cost:**  $(TN + DR) \times Dur \times Spd \text{ Multiplier}$ , rounded down. A weapon may take multiple guidance options by taking this quality multiple times. This makes it harder to jam the missile, as the secondary system allows a second acquisition roll if the first fails in the case of an ECM evasion. For example, many modern torpedoes are both sonar-homing and operator-guided. In this case the calculation will be  $(Highest\ TN + (1/3\ of\ other\ TNs) + DR) \times Dur \times Spd \text{ Multiplier}$ , rounded down.

Guided Missiles cannot be combined with Cone or Melee Qualities. It can be combined with Automatic, representing a salvo of missiles; when the missile makes its attack roll, it is treated as a Burst attack using as many missiles as were fired, minus any that were shot down. Adding the Dropped and Short-Range restrictions can create "Smart bombs" where the missile's Duration is always 1.

## Poisons

Poisons are described by their Mode of delivery, Speed (Spd), Damage Rating (DR), and Duration (Dur). See the ASSEMBLER Core Rules for a full description of poisons.

### Mode

The mode is the manner in which a poison or drug is introduced to the victim. If a particular poison type does not suit these TNs then change the number. The cost is reflected by the final calculation. *For example the GM may decide that the Mental Poison is too high. Changing the TN to 17 will lower the total cost of the poison in the calculation (Duration in Minutes – Poison Spd in Minutes + Poison Mode Target Number) × DR.*

#### TN Mode Example

15	Contact – Skin absorbed.
18	Blood – Injected or via abrasion/cut. Usually very fast acting.
21	Inhaled – breathed into the lungs. Powder, smoke or vapors
22	Mental – a form of psionic attack or scare affecting Mind Attributes or Sanity.
24	Ingested – swallowed poisons, generally slow, though faster acting than contact

### Speed of Poisons and Drugs

Speed (abbreviated "Spd") measures how often the poison or drug's effects are applied for the Duration.

### Effect

The Effect (abbreviated "Eff") represents the amount of damage or other effect caused by the substance.



For example, a sleeping drug rated at DR3 will cause 3d6 of stunning damage. Once the victim's LIF reaches zero, they are asleep. If a mental poison was administered causing direct damage to a character's INT attribute then the damage is 3 points per Spd for the Duration.

Beneficial and medicinal drugs work by adding to an attribute and/or LIF depending on the effect desired.

For example, a stimulant rated at DR2 will add 2 to REF and 2d6 to LIF.

### **Duration of Poisons and Drugs**

Duration (abbreviated "Dur") is the total amount of time that a poison can affect someone after it is introduced to the victim. Chin-doku has Eff 2d6, a Spd rating of one minute and a Duration of 10 minutes. This means that the poison will cause 2d6 of effect every minute, for 10 consecutive minutes.

**Mecha Point Cost:** (Duration in Minutes – Poison Spd in Minutes + Poison Mode Target Number) × DR

### **Smoke**

The attack produces an obscuring smoke cloud. Smoke gives a visibility modifier (TN), and also gains a +2 TN penalty vs. lasers. The smoke remains for a number of turns equal to the Smoke TN modifier and spreads in a radius (in meters or yards) determined by the cost. If the attack is assigned the Emanation quality, the base duration doubles (or the radius of effect may double, as per the normal Emanation rules). However the environment may reduce this duration depending on the G.M (such as strong winds). A smoke screen would have Short Range or Dropped restrictions. A Player may choose a thicker smoke (and therefore higher TN modifier).

**Mecha Point Cost:** Smoke TN Modifier + Radius of Affect in Meters or Yards

### **Hot Smoke**

As smoke, but also affects thermal and infrared sensors.

**Mecha Point Cost:** (Smoke TN Modifier + Radius of Affect in Meters or Yards) ×2

### **Tangle**

The attack projects a web or net and requires an attack roll. If combined with Blast it will affect everyone in the area; if combined with Emanation, it is sticky, and will affect anyone who moves into the area as well. The TN to break free is 18 plus the Tangle modifier.

Anyone in the effect's area when the spell is cast must make a REF Attribute Check. If this roll succeeds, the creature is entangled, but not prevented from moving, though moving is more difficult than normal for being entangled (see below). If the roll fails, the creature is entangled and can't move from its space, but can break loose by spending 1 action and making a STR Attribute check or a Contortionist skill check against the Tangle TN Modifier. Once loose (either by making the initial Reflex save or a later Strength check or Escape Artist check), a creature remains entangled, but may move through the web very slowly. Each action devoted to moving allows the creature to make a new Strength attribute check or Contortionist skill check. The creature moves 2 meters for each full 5 points of effect over a TN of 12.

If you have at least 2m of web between you and an opponent, it provides a partially obscured modifier (-1). If you have at least 6m of web between you, it provides a completely obscured modifier (-5).

**Mecha Point Cost:** (Tangle TN Modifier +10) ×2

## **Qualities and Restrictions**

A weapon may have qualities or restrictions. A quality is something advantageous; a restriction is something limiting. This will affect the Mecha Point cost of the weapon.

If the weapon has no extra qualities, its cost is unmodified. If it has 1, "multiply" its cost by 1.5. If it has 2 or more, multiply the cost by the number of qualities. Thus, a weapon with 3 qualities costs three times as much.

If the weapon has no restrictions, use its cost as modified by the number of qualities. If it has 1, divide that cost by 1.5. If it has 2 or more, divide the cost by the number of restrictions. A weapon with 2 restrictions costs half as much.

Example: A weapon has an unmodified cost of 30 Mecha Points. If it has one quality and three restrictions, the cost is 30 times 1.5 (the quality) divided by 3 (three restrictions) = 15 Mecha Points. If a cost is fractional, drop all fractions. Thus, 22.7 Mecha Points is rounded down to 22 Mecha Points.

## **Weapon Qualities**

Some weapons have additional capabilities beyond simply inflicting damage.

Qualities marked with an \* can only be used with attacks that inflict dice of damage. A few qualities are especially powerful, and hence count as two or even three qualities.

### **Accurate**

The attack is unusually accurate giving a +1 bonus to Attack rolls (or advantage checks if the attack has the Mind or Soul Attack advantage) or +2 to the Range Modifier (RMod). This Quality can be assigned two or three times for a +2 or +3 bonus. The accurate quality cannot be taken with Guided missiles. +1 Bonus to Accuracy (Acc) or a +2 bonus to Range Modifier counts as one quality.

### **Affects Incorporeal**

This attack will affect characters or mecha who are currently Astral or Incorporeal as if they were solid. Counts as two qualities.

### **Armour-Penetrating (AP)\***

This weapon is especially good at punching through heavy armour. It ignores the first 10 points of Armour or the target's Armour protects at half value (round down), whichever gives the **best** effect.

This quality often represents shaped-charge High Explosive Anti-Tank (HEAT) and Armour-Penetrating fin-stabilized discarding sabot (APFSDS) ammunition used by tank guns and missiles.

Armour-Penetrating can be taken multiple times: two levels ignore the first 20 points of Armour (or divide Armour by 3), three levels ignore the first 30 points (or divide by 4), and so on.

## Aura

Rather than having to make an actual attack, the mecha instead automatically damages anyone who touches its chassis. An example might be a mecha who was sheathed in flame or electrified. If this quality is combined with Area Effect, it automatically damages anyone in the designated area around the character. Aura counts as two qualities.

## Automatic\*

Automatic (A) weapons fire a burst or stream of shots as long as the trigger is held down (until they run out of ammunition). One Automatic quality assigns a **Rate of Fire (RoF)** of 4. The weapon cannot fire single rounds unless the selective fire quality is taken or the firer is, at least, expertly skilled in the weapon.

There are three ways to use automatic:

### Burst

A burst autofire (or “auto-burst”) attack consists of firing a short, controlled burst of fire at a single target. The shooter makes an attack roll against the target, with any modifiers for size, distance, and so on. On a successful attack roll, one projectile plus an additional projectile for every 2 full points of effect number hit the target. The maximum number of rounds that may be fired in a burst is 4.

### Spray

With a spray autofire attack, the shooter can attempt to hit multiple targets at once. The player must define the width of the area (in meters/yards) before the attack roll is made. This area is called the “fire zone.”

The maximum number of rounds that can hit a given target in the fire zone is equal to the total width (in meters) in the fire zone divided by the number of rounds being fired, rounding down.

The attacker makes a skill roll for each target, with a –1 penalty for every 10 rounds (or fraction) in the attack, plus any modifiers for size, distance, and so on. On a successful attack roll, one projectile plus an additional projectile for every 3 full points of effect number hit the target.

### Stream

A stream autofire attack consists of aiming the weapon at a single target and releasing a stream of rounds or projectiles at it. This is sometimes referred to as “hosing” a target. The shooter makes an attack roll against the target at a –1 penalty for every 10 rounds (or fraction) in the attack, plus any modifiers for size, distance, and so on. On a successful attack roll, one projectile plus an additional projectile for every 2 full points of effect number hit the target. The maximum number of rounds that may hit a target is equal to the RoF for the weapon.

### Multiple Assignments of Automatic

Automatic can be taken multiple times. This emulates Gatling guns like the 20mm Vulcan or 7.62mm minigun or multiple linked machine guns. For every time Automatic is purchased an additional +4 is added to the **Rate of Fire (RoF)**.

## Blast (EX)

The attack affects not only the target but also anyone adjacent, such as an explosive warhead or plasma blast. Abbreviated, as “EX”, the radius of effect is 3m. Blast can be taken multiple times. Each time it is taken, double the radius of the blast. Thus, taking it 4 times gives a 24m blast radius.

When a target is hit, everyone caught in the blast (other than the target directly hit) may make a Reflex save (mecha Operators roll for their mecha) against a TN of 15 to halve damage. The target of the attack, if hit, takes full damage — no Reflex save is allowed. Alternatively, an attacker may fire a Blast weapon at the ground next to a target (treat as DEF of 12), rather than the target itself. This can have a better chance of hitting, but has the disadvantage of always granting a Reflex save. This tactic is not possible against a flying or space target unless the attack has the Guided quality.

Use the rules for Targeting Explosive Attacks to determine the effect of a miss.

## Burning\*

This represents flaming liquid, acid, or similar weapons that deliver continuing damage. If the initial attack hits, the target takes continuous damage each action, for the next 5 actions, or until somehow neutralized (GM call: it should depend on the type of attack). Armour or Force Fields do protect against the damage.

It can be taken multiple times; each extra time doubles the duration.

The first level of Burning counts as two qualities.

## Concealed

Mecha’s weapons are normally obvious, at least to someone who knows where to look for the gun barrel, missile port, or laser lens. Take this quality to install a disguised or retractable weapon in a craft that looks like it would be unarmed, such as an ordinary-appearing automobile.

It takes a move action to “pop up” a hidden weapon so that it can be used in battle.

## Cone

A cone attack shoots away from the weapon in the direction he or she designates. A cone starts from the mecha weapon’s barrel and widens out as it goes. A cone’s width, at a given distance, equals its current range increment — i.e. a cone is 15m wide when 15m away from the attacking mecha. At its far end, a cone is as wide as the effect is long.

A cone attacks effect is limited to a tenth of maximum range (its increment); cone attacks have very short range.

A cone attack is not resolved as an ordinary attack. It automatically hits everything in the target area, but targets gets a Reflex (TN 18) save. Success means they suffer half damage, failure means they take full damage. Cover will give a bonus to the Reflex save, and if the cover is sufficient (such as a slit trench, building, etc.) a success means the targets dove or moved behind the cover, and took no damage rather than half damage (GM discretion). Cone counts as three qualities.

---

## Emanation

Some attacks have an area like a blast, except that the effect continues to radiate from the point of origin for multiple actions. The effect is the same as Burning, above, lasting 5 turns, but affecting everyone whom enters an area only for as long as they remain in it (unless also combined with burning).

The radius of effect is 1.5m. The quality can be taken additional times. Each time it is assigned to a weapon, double the radius or the duration (designer's choice).

The first level of Emanation counts as two qualities.

---

## EMP\*

The weapon's damage is an electromagnetic pulse that has no effect on living things but will do normal damage to any mecha with electrical or electromagnetic systems. This is a quality, not a restriction, since it allows safe use of anti-mecha weaponry in situations that would otherwise put bystanders at risk. Use the standard Armour Value damage reduction rules and deduct the resulting points from the Mecha REF. An example of this quality is a starship "Ion Cannon" which is designed to disabled a craft rather than destroy it.

---

## Extended Range

This quality doubles the base weapon range. Extended Range can also be taken multiple times; each time it is taken, double the increment. For every extended range quality taken, increase the Rmod of the weapon by +1.

A lower increase can be specified if the GM desires — for example, Extended Range could also be used to multiply the increment by 1.1 to 1.99 rather than 2. This is useful if trying to duplicate a real weapon.

---

## Extra Ammo

This increases the weapon's total shots from the default up to 50. It can be taken multiple times: twice gives up to 200 shots; three times is 1,000 shots.

---

## Flexible\*

This represents long, flexible, or extendible attacks like a whip, energy-lash, razor-ribbon, or similar weapon.

A flexible attack can be used like a giant whip to disarm or trip any opponents of equal or smaller size than the weapon's size; for example, a Very Large whip can trip or disarm opponents up to Very Large size. A character can make a trip attack with a flexible weapon by succeeding at a ranged touch attack. The character does not provoke an attack of opportunity when using a flexible weapon in this way.

A flexible weapon also gives a +2 bonus on an opposed attack roll when attempting to disarm an opponent (including the roll to keep from being disarmed if the character fails to disarm the opponent).

---

## Force Field Penetrating

Similar rules as the armour piercing quality except it is applicable for a 10 point reduction in force field protection. Penetrating can be taken multiple times: two levels ignore the first 20 points of Force Field HITs (or divide HITs by 3), three levels ignore the first 30 points (or divide by 4), and so on.

---

## Hardpoint or Hand-held

A "Hardpoint" weapon is mounted on a hardpoint, pod, or pylon. It can be traded in a later mission for any weapon of the same size and same or lower Mecha Point value, subject to its availability. It takes about 10 minutes to remove and replace a Hardpoint weapon with another weapon. A character may buy "spare" weapons at 1/20<sup>th</sup> their Mecha Point value that are kept at base for replacement in this way, or may swap weapons with other mecha of similar size and type.

A "Hand-held" weapon is carried in the hand. It is treated as a hardpoint weapon except that it is vulnerable to being disarmed, lost, dropped, etc., but can be exchanged in only one turn. Mecha cannot have more Hand-Held weapons ready to use than it has hands. A Mecha attempting to use hand-held weaponry originating from mecha more than one size above will gain penalties to handle/fire accordingly (use like a STR Min Stat)

---

## Indirect Fire

The weapon can fire shots in a high ballistic arc, like a grenade launcher, ballistic missile, or Howitzer. This lets the gunner shoot at targets hidden behind buildings, hills, or other obstacles (or shoot over the horizon, if the range is long enough).

If it is used to make an indirect fire shot, the attacker must be able to see the target, or someone else must spot it and radio or otherwise communicate its position to the attacker. This will usually require a Computer Use check. In most cases, indirect fire involves using weapons with the Blast quality to attack an area. If a creature or mecha, rather than area of ground is attacked, it is treated as being Completely Obscured (-5 Modifier).

A weapon can fire indirectly at 10 times the usual number of increments (100 increments for most weapons). Note that the actual range increment is not increased: thus, Extended Range fire will be rather inaccurate.

If the attack misses, an observer can note where the attack hit and send a correction (or the attacker can correct by his or her self, if the target is in sight). Each correction gives a +2 bonus to hit, only to cancel any range increment penalties. It takes a full action for a distant observer to transmit a correction via communicator.

A weapon with Indirect Fire quality can be used normally at no penalty. It cannot be Melee, Cone, or Stream.

---

## Invisible

Most weapons produce some visible muzzle flash or beam, revealing the position of the shooter. Take this quality for any weapon (except one with the Melee or Thrown weapon restriction) that has no visible flash or beam.

---

## Mecha Drain

The attack causes the victim to suffer systems disruption and/or loss of co-ordination. The victim's STR, REF, or HLT

(chosen when the attack is designed) is reduced by 1. The mecha attribute drain is in addition to any HIT Point losses from the attack. To design an attack that only drains the chosen Attribute, but inflicts no other punishment, the No Damage restriction must also be assigned. If a target's HLT is drained to 0, it is rendered disabled. Lost Attribute Score Points are recovered at two Points per hour of Field Repair (doubled with proper repair facilities). This quality can be taken more than once to increase the attribute reduction per attack. Unless force field penetration is selected, the mecha must be hit twice successively to drain an attribute point. Counts as two qualities.

---

### **Muscle-Powered**

This lets the mecha add its STR bonus to damage if this weapon is used as a one-handed Melee weapon, or 1.5 times STR bonus if used as a two-handed Melee weapon, or half STR bonus if the weapon is Thrown.

A Muscle-Powered weapon can make any number of attacks unless it has the Thrown weapon restriction (in which case it can make another attack only after the Thrown weapon is recovered...).

A weapon can only be Muscle-Powered if it has the Melee or Thrown Weapon restriction.

---

### **Non-repairable**

The attack produces damage or other effects that do not regenerate normally, and are not repairable by normal methods. Rather than repairing at a normal rate or being amenable to standard engineering principles, systems recovery cannot take place until some exotic event or diagnostic has occurred. This requirement must be specified when the attack is designed, subject to GM approval. Non-repairable counts as four qualities.

---

### **Operator Detonation**

The weapon is a form of grenade, bomb or magical effect that can be set as a timer or detonated remotely (pick one). The timer quality is a set detonation time, usually in seconds, that can't be adjusted. Operator Detonation is limited by a form of communications and can be detonated at any time. Both forms of detonation give opponents the opportunity to mount a disposal effort. Either of these qualities can be set to "Immediate/Impact" detonation however. By taking this quality twice, a timer can be variably set, and an Operator can detonate the weapon using more than one means. The more qualities taken means more options for the operator. Example, for 4 qualities, the weapon could be variably timed (2), or detonated via cellular phone signal and UHF+ radio transmission.

---

### **Quake**

This attack causes a linear shock wave in the ground, causing rumbling and fractures. The quake "fault" will only be large enough for one person or medium sized mecha to fall into its depths unless it is combined with the Area Effect Quality. A victim may fall into the crevasse if he or she fails a REF Attribute check against a TN. The fissure will be approximately 1m deep for the first 5 points of damage (including bonuses for Strength) and is doubled for every additional 5 damage the attack inflicts. Thus a quake that delivers a total of 15 damage creates a fissure 3m deep, while one that delivers 30 damage creates a crevice 6 meters deep. Quake can only be used on a solid surface (which may be earth, sand, cement, or asphalt). Quake costs one quality for a Tricky TN against people falling in. For every extra difficulty level in TN, add a cost in qualities. *This would mean a REF attribute check against a legendary TN would cost six qualities.*

---

### **Selective Damage**

The weapon may switch between various increments of damage lower than the primary damage. Alternate damage is engaged by taking an action to hit a selector. This quality does not allow for variations on the qualities and restrictions of the weapon just the actual damage inflicted. With the right concept, this quality can also represent a "welding" or cutting" tool. If a weapon concept requires that a pod be able to fire ballistic rounds and also be able to switch to a stream of napalm, the weapons should be built individually then a primary (full cost) and secondary (tenth cost) weapon assigned. Selective Damage costs one quality for every increment of alternate damage the weapon inflicts. For example a 20d6 weapon with an anti-crowd control Selective Damage option (2d6) costs one Quality.

---

### **Selective Rate of Fire**

The weapon can be switched to either auto or single shot. If the weapon concept asks for more than one selection of rounds then there is no further cost. For example a weapon with 2 qualities in Automatic has the option at weapon creation to select Single and Full auto or the option to designate Single, RoF of 4 and Full Auto. Trained operators of a weapon can switch selections during a movement action. Untrained operators require a full Turn to select the RoF.

---

### **Silent**

Most weapons useable at range are usually noisy, making a loud bang! Or zap! Take this quality for a weapon that does not have the Melee or Thrown restriction, or will be used only in space, which is very quiet or silent.

---

### **Trap**

This weapon lays a minefield, spikes, or some other similar device. The projectile "sits and waits" until someone triggers it. If someone walks into the target area, they get a Reflex Save (TN 15) to avoid it. Trap can be taken with the Melee restriction to simulate a booby trap placed by hand or released from the mecha. Without these weapon restrictions, it can be deployed at range — a successful ranged touch attack against a Defense of 10 means the Trap was fired into the correct area.

---

### **Unlimited Shots**

The weapon does not run out of ammunition or power. It can fire indefinitely, usually drawing on the mecha's own power supply. This need not be taken if the weapon has Muscle-Powered. It usually cannot be taken in conjunction with Automatic, Guided Missile, or Volley.

Unlimited Shots counts as 4 qualities.

## Vampiric

This quality can be added to any attack that causes normal damage or drains Attribute Score values. Upon a successful attack, the lost HIT Points or Attribute Scores are transferred to the attacker. Vampiric counts as two qualities if the attack can only restore lost Attribute Points (thus, the Mecha could heal itself). It counts as three qualities if the attack can increase the Mecha's HIT Points above their normal maximum value (no more than twice normal, however). Finally, it counts as four qualities if the attack can increase the Mecha's Attribute Scores above their normal maximum value). Any values or Points in excess of the Mecha's normal level fade at a rate of 10 HITs or two Attribute point values per hour. This quality may not be combined with Area Effect. Vampiric costs 2, 3, or 4 Quality slots.

## Volley

An attack with the Volley quality fires a large volley of poorly guided projectiles, such as a salvo of unguided rockets or a broadside of cannon balls from multiple guns. The pilot does not add a Mecha Combat bonus or Reflex Bonus but does add +1 per projectile fired.

The maximum number of shots that can hit is the number fired. Volley weapons usually have a slow firing restriction to simulate reloading.

If firing against a group, the attacker determines how many shots to aim at each target. Separate attack rolls are made for each target. Determine how far the furthest two targets are from one another. The attacks are made as for volley fire against one target, but for each 10 m or part thereof that separates the furthest two targets, all the attack rolls suffer a -1 penalty. If there is a critical hit mechanic in the game (see the Action! System optional rules regarding the use of a 2d10 or 1d20), rather than increasing damage, double the number of shots that hit (up to the maximum).

Every 6 shots fired in a volley costs one quality.

### Volley Hits per Attack

Attack Succeeded by	Number of Hits
0-4	1 hit
5-9	1d6 hits
10-14	2d6 hits
15+	3d6 hits

## Weapon Restrictions

Few weapons do everything well, and many have various disadvantages. As with weapon qualities, a single restriction can only be taken once unless specifically permitted.

Assign the weapon one or more restrictions. If the weapon has none, its cost is unchanged. If it has 1, divide its cost by 1.5. If it has 2 or more, divide by the number of restrictions.

Some restrictions are especially onerous and so count as two or even three restrictions.

## Crew-Served (Vehicle only)

The weapon requires two or more people to operate it — usually the gunner and one or more loaders.

This must be taken in conjunction with the Slow-Firing restriction; it can be taken multiple times. Each time, double the number of crew required to load the weapon; they must all perform full actions to do so. Thus, a cannon that requires a crew of 8 to operate is a ×3 restriction.

## Drop Shields

This restriction can only be taken if the Mecha also has a Force Field. It requires the Mecha to turn off all Force Fields before using the attack, and they must remain down until the Mecha's action on the following turn.

## Dropped

The weapon is a bomb, mine, etc. that must be dropped from a flying mecha that is approaching the target. The TN to hit a target hex while bombing is 15 +1 for every 200m of altitude and +1 per 160kph (100mph) of speed. This cannot be used with Cone, Stream, Melee, or Thrown. However, if a weapon can be "either" dropped or thrown the restriction divisor is 1.5.

## Exposed (Vehicle only)

The gunner must be outside the mecha's Armour on the turn that the weapon fires. They stay exposed until his or her next action in the following turn. An exposed character can be fired at with no Armour protection. An example of this weapon restriction would be a machine gun mounted on a bracket atop a tank whose gunner must lean out the hatch to use. It cannot be taken if the mecha already has the Open Defect.

## Fixed Arc of Fire

### (Vehicle and Giant Robot only)

The weapon has a very limited arc of fire and must be aimed by pointing the mecha. For example, a set of fixed forward-firing guns on a fighter plane, or a ramming prow. The weapon can only be fired at targets in the specified arc, which may require a successful Pilot Skill check (which can be opposed by the pilot of a target mecha). This restriction cannot be taken more than once with a single weapon. See the Turret restriction for a wider arc of fire.

Specify the arc of fire: Front (Fr), Rear (Re), Left (L), Right (R), or Top (T). Mecha that can fly or move underwater can also specify a Bottom (B) arc.

---

## Inaccurate

The attack is not as accurate giving a –1 penalty to Attack rolls (or advantage checks if the attack has the Mind or Soul Attack advantage) or –2 to the Range Modifier (Rmod). This Restriction can be assigned two or three times for a –2 or –3 penalty. The inaccurate restriction cannot be taken with the Guided quality.

Each Penalty to Accuracy (Acc) or –2 penalty to Range Modifier counts a restriction.

---

## Less Ammo

The weapon is only good for a few rounds of firing, and then runs out of ammunition or power, or burns out. This restriction can be taken up to 5 times.

If the weapon is Slow-Firing, number of shots refers to the total ammunition aboard the mecha, not in the magazine. Taking this restriction once means the weapon has 9-16 shots; twice limits it to 5-8 shots; three times to 3-4 shots; four times to 2 shots, five times to 1 shot.

### Option – Clips

There is also the option of taking Less Ammo – Clips. This restriction can be taken with the Extra Ammo Quality and breaks the total amount of mission ammunition into thirds. This means a mecha can have 900 rounds from the extra ammo quality in 3 lots of 300rnd clips/belts/magazines. Use the Assembler Core for reloading modern weapons. This option can only be taken once.

---

## Low Penetration\*

The attack is easily defeated by Armour (examples include a shotgun blast or hollow-point bullet). Armour stops twice as much damage as usual. Counts as two restrictions.

---

## Melee

The weapon can only be used as a melee weapon. It can be used to attack or parry within the mecha's natural reach. Specify the weapon's size class (normally within one size of the mecha that will wield it) and whether it is bludgeoning, piercing, or slashing.

It is usual to take this restriction in conjunction with the Muscle-Powered quality. Melee counts as two restrictions.

---

## Missile Weapon System

This restriction only applies to Special Attack weapons that do no physical damage but act like a missile system. This can be used to simulate smoke, fire-retardant or poison mist missiles. These non-combat missiles can only have a Mode TN 15, Spd 6 and Dur 1 and after successfully impacting, the special weapon operates normally (i.e. bonuses for Hot Smoke).

---

## Only In (Specified Environment)

The attack or weapon can target only objects that are on or in a particular limited environment, for example, "only in water" (representing a torpedo) or "only in space" (representing a powerful weapon that requires a vacuum to work). The environment should not be one that is ubiquitous in the campaign (for example, "only in air" is not valid unless a lot of the game action will take place in airless environments). If the environment is very rare in the campaign, the GM may allow this to count as two restrictions.

---

## Powered by Attribute

The number of a nominated Attribute (STR, HLT, REF) is the number of charges/rounds the weapon has a day. This weapon also drains an attribute point for a day representing the drain imposed on using the weapon. Impose the new derived attributes based on the drained attribute for the rest of the adventure or until sufficient rest is gained. If the Automatic Quality is taken, this restriction represents the ROF in rounds rather than individual shots that make up the ROF. So a burst of 4 rounds in a weapon with a ROF of 4 and powered by an attribute would only cost a single attribute point. In the Ammunition (Amm) column enter the attribute to denote this restriction.

Powered by Attribute counts as three restrictions.

---

## Separate Gunner

The weapon system requires the presence of another operator to be successfully fired. The pilot can attempt to use the weapon at with no skill bonuses to target an opponent while still operating the mecha.

---

## Short Range

This restriction halves the base range increment (round down). It can be taken twice if desired, to get 1/4 range. An even lower range can be specified if the GM wants to duplicate a weapon in other System books, but there's usually no extra cost benefit. Every short range restriction taken has a –1 Rmod penalty.

Short range may not be taken if the weapon has Melee or Thrown restriction.

---

## Slow-Firing

The weapon has a restriction that reduces its rate of fire, such as requiring a full action (to aim, charge, or load the weapon) before making each attack. Perhaps the attack generates heat that must be dissipated before it can again fire safely. Consequently, the weapon fires every other turn (or more). The weapon cannot be used to attack multiple times in a turn, nor can a different character fire it on the turn it is being loaded. This restriction cannot be used with Automatic.

Record a rate of fire of 1/2, which represents one shot every two turns.

This can be taken multiple times; each time it is taken, loading requires an extra Turn's full action. For example taking this restriction 3 times means a rate of fire of 1/4 (see Rate of Fire page 154)

Slow firing counts as two restrictions.

## Start-up time

Some weapons require an activation time before they can be used. The time required is dependent on the number of restrictions purchased. This can represent barrel rotation, optimum temperature or other reasons required for this extra time. After that the weapon can be used normally but should the weapon be idle for longer than a turn, the start up sequence must be started again (to prevent mechanism wear or similar). Costs one restriction for every 2 turns required to activate the weapon.

## Space-Optimized

The weapon's energy is easily absorbed by air; its full range only applies in vacuum. In atmosphere, its maximum range is halved and it cannot penetrate thick smoke, fog, water, etc. Ranged weapons doing energy-type damage should only take this restriction. It is a common restriction for laser and particle beams. It cannot be assigned to melee or ballistic weapons.

## Static

The weapon cannot be fired while the mecha is moving under its own power; perhaps it is too bulky, requires precise aim, or drains too much power, or maybe the mecha's fire control system is not advanced enough to compensate for movement. This does not prevent firing while drifting, coasting, etc.

This restriction is commonly taken for artillery-type weapons (especially in conjunction with Indirect Fire).

## Stun

The attack only inflicts subdual damage that affects characters/organic creatures but not Mecha/Inanimate Objects.

## Thrown

This restriction means it is a thrown weapon. Once thrown, it is useless until retrieved. Specify the weapon's size class and whether it is bludgeoning, piercing, or slashing. The weapon's range increment is divided by 10 (if the base is 150m, it will drop to 15m), and it can be thrown a maximum of 5 increments.

It may not be taken in conjunction with the Melee or Slow-Firing restriction. It is often taken in conjunction with the Muscle-Powered quality.

It may be taken with Automatic Fire (representing a handful of small thrown objects, for example). Record a rate of fire of 1, reflecting the fact that the weapon must be reloaded or charged after each shot.

Thrown Weapon counts as two restrictions.

## Turret

The weapon can be independently aimed to other arcs for firing (see fixed arc restriction). However each change in arc uses an additional aiming action per restriction bought. Game Masters should define what arcs the weapon cannot aim towards at the mecha construction stage. Turret costs an action per arc per restriction. Therefore changing aim from forward to rear would be 3 arcs (180 degree turn ÷ 60 degree arcs) and would take 3 Turns before firing can commence. Use the normal combat penalties for attempting to rush aiming a turret weapon.

## Unreliable

The attack tends to jam. Any time the player loses the attack roll by an effect number show on the table below, the weapon fails to fire and jams, over-heats, or otherwise malfunctions. It will not work until repaired. Clearing a jammed weapon requires a full action and a successful Mecha Combat check against a TN provided by the table. Note: a character cannot attempt to clear a jammed weapon if he or she does not have the appropriate Weapon Proficiency Feat. If unsuccessful, the character can try again next turn.

Taking this restriction twice adds 3 to each level of TN depending on the effect number (EN) rolled.

### Effect Number per failed Attack

Attack Failed by	Effect
5-9	Clearing a jammed weapon requires a full action and a successful Mecha Combat check against TN 10
10-14	Clearing a jammed weapon requires a full action and a successful Mecha Combat check against TN 12
15+	The jam is severe and cannot be cleared without an hour's work and a successful Craft (Mechanical or Gunsmith) Skill check against a TN of 15

## Unwieldy

The weapon was not originally designed for the mecha and affects performance in some way. This restriction is generally taken for weapons designed as hard-points where the mecha is "laden" with the munitions until disposed of during the mission. By taking this restriction, the mecha loses either maneuverability (REF) or speed. For each restriction in Unwieldy choose to reduce an attribute point in REF or reduce the top movement multiplier by 1. When the mecha has depleted the payload, detached the hardpoint or simply dropped the weapon, the restrictions are canceled. A mecha cannot have negative speed or zero Maneuverability attributes.

Restrictions	Maximum Speed	REF
1	Running ×2 MOV	-1
2	Normal ×1 MOV	-2
3	Cautious ×½ MOV	-3
4 (Limit)	Stationary, Immobile	-4



## Step 9: Mecha Skill Requirements

The mecha is complete and now needs the skill requirements to operate this mecha to its full extent. Multi-modal mecha usually require multiple pilot types, civilian mecha may require some engineering skills to operate and military mecha need a specific Mecha Combat (SPEC) named for a character to specialize in. Any mecha plug-in options should be placed under the plug-ins description rather than with the original mecha.

Merged mecha require a primary pilot to have the Gestalt Mecha Pilot skill. The Mechamorphosis skill isn't mandatory for transformable mecha piloting as the mecha combat specialization teaches the pilot into using multiple modes. Mechamorphosis goes that one step further and gives the pilot new options in using multiple modes.

*For example: The new civilian XFT-34 Bullet Train would require the Mecha Pilot (Rail) skill. A pilot who had previously driven trains or monorails would be able to pilot this vehicle without many worries.*

*The army version, the XFT-34M, has a sophisticated weapons control system to run the missile defense and ICBM guidance and launch sequence. An operator would need the Mecha Combat (XFT-34M) skill to compliment the Mecha Pilot (Rail) skill and operate the launch controls. The army's greatest secret is the XFT-34M's modular transformation system, which converts the train into a giant robot. This means the pilot would also need the Mecha Pilot (Biped) to use the robot mode. The Mecha Combat skill already gives the character the necessary knowledge on the mecha's robot weaponry. The only other optional skill for the pilot is the Mechamorphosis skill so that the character might learn how to charge a target in train mode and transform on the go to deliver a flying kick.*

## Characters and their Mecha

The following section describes the interaction between characters and their mecha.

### The Classic Robot or Power Armour Pilot

The field of battle looks very different when commanding a large, powerful war machine. Mecha Pilots know that they are the elite of any army, even if they stumbled upon their mecha by accident or they were saddled with the responsibility to pilot it. The Mecha Pilot's life is marked by growth both as a warrior and a person, learning the controls of his or her great machine at the same time that they try to understand the basics of human behaviour. Although the mecha gives meaning to the Mecha Pilot's existence, he or she must learn that real life starts once they leave their cockpits. Check out the [webpage](#) for examples of mecha pilots in various campaign settings.

#### Characteristics

The mecha dominates the Mecha Pilot's life. They can own more equipment depending on their affiliations, but eventually they return to their great machine. They have a skill that precious few people have, and they develop an aura of mystique even if they hate themselves for it. Paramount to the mecha's maintenance is the Mecha Pilot's dependency on an organization, which is often a country's or planet's military, but might even be a private concern bent on protecting the planet from outside threats.

Mecha Pilots usually engage in friendly rivalries over their respective vehicles. Giant Robots are a big and attractive enigma to the Mecha Pilot, and they make friends with technical geniuses in order to get improvements to their machine. A high skill level is essential for a Mecha Pilot since many mecha based skills are derived from the mecha's own dexterity and reaction speed. A high Presence and Intellect attribute is also important; the Mecha Pilots must make informed decisions and rally the troops to carry on the good fight.

Some Mecha Pilots are chivalrous, hot blooded, and confident, but most know war is not a game, whether the foe are criminal gangs, terrorists, or the armed forces of rival powers. They may ponder over whether to climb into the cockpit again — or even consider deserting — but when they actually get on the battlefield, they fight to win, using their superior fire-power to reap lesser adversaries like wheat before a scythe as they smash their way toward their opposite numbers. The most famous Mecha Pilots — like fighter aces of the past — are renowned for situational awareness, the always-preternatural "sixth sense" of keeping track of everything in the confusion of battle that lets them fight many foes at once.

#### Occupations

The character can be a military Mecha Pilot in a modern military or paramilitary force. He or she might be a member of the armed forces, a SWAT team, or even a freelance mercenary, and could operate a giant robot, jet fighter, helicopter, or tank ... or a machine that transforms into each. Most Mecha Pilots consider themselves elite compared to infantry soldiers, patrol cops, or other "ground pounders."

Mecha Pilots may fight for glory, honor, or even loot; some are reluctant warriors, battling because they feel they have no choice. The enemy is coming, and they are all that can protect their loved ones, their comrades, their country, or their world. Sometimes that war has already been lost ... and now they seek revenge.

Some operators are steely-eyed professionals who graduated from a military academy operate combat mecha. Other pilots are scarred veterans of a hundred battles, and a great many by angst-ridden 14-year-olds who've barely read the manual. In short, a Mecha Pilot can come from any class, race, or background.

### Mecha Operators

A character in a mecha fills one of several possible roles, which determines what the character can do. These are the crew assigned to control the mecha's movement, weapons, sensors, etc. Often a mecha has only one Operator.

#### Pilot

The pilot of the mecha controls its movement (and any limbs, if a giant robot or suit). Depending on the type of mecha, he or she may be styled as "driver," "helmsman," "steersman," etc.

Most mecha have only one position from where the mecha can be operated, so the person there is the pilot. Operating a mecha is, at a minimum, a move action, which means that the pilot may be able to do something else with his or her attack action.

## Commander

In some mecha, there is a captain or commander whose main role is to give orders. He or she can help any crew member (pilot, gunner, etc.) by taking an Attack action. This can represent giving advice, highlighting targets or directions to travel, and so on. Doing so is a move action, leaving the commander an attack action each turn to do something else — control another weapon, or act as an equipment operator, perhaps. Mecha can have only one commander at a time.

## Gunner and Loaders

Some mecha have built-in weapons. If such a weapon is controlled from a location other than the pilot's position, a character can man that position and become the gunner. Mecha can have as many gunners as it has gunner positions. Some weapons may also require one or more loaders, if they have the Crew-Served weapon restriction, which must be stationed next to the gunner. This doesn't require any special Skill, so loaders often double as mechanics or service crew aboard the mecha.

## Equipment Operator or Lookout

An equipment operator is assigned to operate one or more items of equipment aboard the mecha, such as a radio or sensor, freeing the pilot from having to worry about it. Not all mecha have equipment operators. In combat, the main use of an equipment operator is to make Computer Use checks without the -5 "spotter distracted" penalty that a character doing something else (like shooting or piloting) will suffer. Low-tech mecha may have an observer or lookout, which does the same job without any built-in sensors.

## Passengers

All other personnel aboard the mecha are considered passengers for combat purposes. They may be officially part of a crew — a technician, cook, ship's doctor, a scientist, or a security team, etc. — but they perform no specific role in mecha operation. They may, however, be able to fire weapons from the mecha, perform repairs, fight fires, give advice, or take other actions.

## Crew Quality

Rather than force the GM to create, or remember, statistics for everyone aboard a mecha, mecha statistics include a general "crew quality" descriptor. This indicates a typical crew's aptitude with the mecha's systems. Use the skills level column for all Skill checks related to the operation of the mecha (including Drive and Repair checks). Use the TN bonus for all offensive/defensive rolls performed by the crew.

This does not restrict the GM from creating unique mecha where the crew's statistics are included or using the Minion rules in ASsembler Core.

Mecha Crew Quality	Skills Level	TN Bonus
Untrained	0	-2
Novice	1	+0
Competent	4	+2
Expert	7	+4
Ace	9	+8

## Mecha Operation

Skills are used in conjunction with attributes to resolve actions. When characters attempt an action in the game that has an uncertain outcome, the player tells the GM which skill his character is using and how he is using it. The GM sets a difficulty level for the task (see *Difficulty Levels and Target Numbers*, below).

## When to Roll

The most important thing to remember is that no skill rolls are needed for characters to accomplish everyday tasks related to their skill. Rolls are required only for tasks that are out of the ordinary for characters with that skill—no matter how hard they might seem to those without the skill.

Obviously, if everyone had to make a Driving skill roll just to drive to work, no one would survive the commute! Also, excess skill rolls only slow down the game. Save the rolls for amazing tasks or exciting action sequences involving great risks and daring acts.

## Target Numbers in Combat

In cases where a character is trying to attack another character, such as in melee or ranged combat, use the target's DEF as the base TN instead of the table above. If the character is actively defending himself, add the appropriate skill to the target's DEF score. In addition, the GM can then add any other modifiers, as appropriate. (See *Combat Modifiers*).

*Pat is playing Jake, a barnstormer pilot, in a 1920s otherworldly horror game. Jake has a DEF of 15 and is pretty good at barehanded fighting, with an Unarmed Combat skill of +5. During the game, a mad cultist tries to Grab/Bind with Jake. The GM decides that because they are both using the Unarmed Combat skill that Jake's Unarmed Combat score can be added to his DEF. The final TN that the cultist needs to hit Jake is therefore 15 + 5 = 20.*

## Effect Numbers

The Effect Number (EN) of a roll is simply the number of points by which a skill roll (i.e., attribute + skill + 3d6) exceeds the Target Number. If the dice roll is exactly the target number, the effect number is 0. If the TN is 14 and the skill roll total is 19, the Effect Number is 5.

Effect numbers can be used in several helpful ways in the game. They are used to determine the outcome of contested skill rolls, to determine the winner of a contest (whose arrow is closest to the bulls eye?), to determine the progress of a long task (such as complex repairs, a masterful work of art, ongoing research), and so on.

## Additional Mecha Operation Skills

These skills are added to the Piloting Skill Group for any mecha-based game (see the Skill List [page 15](#))

### Mecha Attribute + Skill

If the GM determines that a player's chosen action requires a skill roll, the GM determines which Skill and which Mecha Attribute (from the Mecha Group associated with the skill) apply to the task.

If an Operator attempts to shoot an opponent with a Railgun, the player must make a Mecha Combat skill roll. Because the Mecha Combat skill is associated with the Mecha Group, the GM must choose Strength, Manoeuvrability, or Hazard Load Tolerance as the attribute that the player uses with the skill. The logical choice is Manoeuvrability, the "Aptitude" Attribute for the Mecha Group.

### Piloting (Type)

Characters with this skill have practical theory and experience operating mecha, including performing manoeuvres in difficult conditions, avoiding obstacles, performing routine maintenance and operating all common equipment normally associated with them (such as climate control, radio, checking gauges, and on-board computers). Attempting combat without being skilled in Mecha Combat (see below) is done at base rolls only (no bonuses). Some mecha require more than one mecha type to competently operate them. *For example a Variable Jet Fighter with a humanoid robot mode would require Giant Robot and Jet Fighters for piloting.* This allows a pilot to be better at some aspects of a mecha than others. The Mecha Combat skill cannot be taken unless the pilot has the necessary skills to pilot all aspects of the mecha.

Mecha Types: Select from a GM-defined list, such as heavy aircraft, helicopters, jet fighters, aerospace craft, spacecraft, starships, animal mecha, giant robot, etc.

### Mecha Combat (Spec)

A character with this skill is trained in how to manoeuvre a specific mecha model (SPEC) into and out of a battlefield. Mainly an INT or REF based skill; the G.M may have many uses for this roll while the character is piloting a Mecha. Tactics, Weapon control, friend or foe identification and combat use are all covered by the Specialization with individual Mecha types. Combat in transformable mecha can be utilized in all modes but complex Mechamorphosis techniques require the skill to be taken.

Specialities: Must choose a model type from the campaign world. G.Ms can allow penalties for pilots flying similar mecha outside their specialization (e.g. flying an older or next generation model).

In the case of upgrading Mecha Combat skills, the player can opt to either spend points on upgrading the skill level or broadening their training by certifying for other similar mecha models. *For example; Herald is an Experienced (level +5) mecha pilot and wishes to certify for the new Mark-7, which is an incredible improvement in weaponry and manoeuvrability from the pre-war Mark-5s they had been using. Since the Mark-7 is a model upgrade from the Mark-5 all that training and experience doesn't need to go to waste. Herald can spend a future Action Point upgrading the Mecha Combat specialization to include Mark-7s at the same level as his Mark-5 mecha combat training. However to certify for the new Fusiliers-Series Mecha, built from the ground up with the new Alien<sup>TECH</sup> he will have to start from the beginning.*

### Monsters and A.I.s

Mecha with their own Mind Group of attributes would call this skill "**Natural Combat**" and be equivalent to a character's Unarmed Combat skill. The specialities could include Air Combat, Ground, Space, Underwater.

### Mecha Plug-in Modules

In addition to a specific mecha or series of mecha (designated as the SPEC), this option allows the pilot to take advantage of various modular attachments or enhancements that can be jettisoned or removed at a later time. This Speciality should be used when the plug-in attachment or enhancement almost creates a different type of mecha. It is up to the GM on whether a new Plug-in that is only just available to a pilot should require an "upgrade" similar to the Mecha Combat skill rather than purchase a new specialization. *For Example the Fusilier Series Mechanimorph cannot escape the Earth's atmosphere without the "Super" Armour add-on. The "Super" armour provides more missiles and a booster that enables the Mechanimorph to break orbit. There is also an "Armoured" add-on available, which is used for static defensive missions where firepower and armour is more useful than mobility. The Armoured add-on was designed first but the super-pack is similar enough to warrant a skill "upgrade" rather than buying a new skill. The ability to use any of these plug-ins could be represented as the skill "Mecha Combat (Fusilier Armour)." However the new Sensor Pack add-on is completely different area of specialization and requires the purchase of the "Mecha Combat (Fusilier AWACS)" skill to properly operate the gear.*

### Mechamorphosis

The pilot is skilled in the art of transformable mecha use. Pilots are trained to use their transformable mecha to perform any of the following manoeuvres as well as any inventive methods of using the transformable nature of the mecha. Game Masters can opt to allow or disallow manoeuvres depending on the combat situation. See the Mecha Combat section ([Page 192](#)) for the following manoeuvres in detail.

Transforming Manoeuvre	Task Difficulty
Modular Leap Attack	Difficult (21)
Mid Air Vehicle Transform	Easy (12)
Modulating Tackle	Challenging (18)
Non-Standard Transform	Tricky (15)
Quick Transform	Tricky (15)
Recovery Transform	Challenging (18)
Running Transform	Tricky (15)

## Mecha Melee

*This skill enhances pilot options in mecha hand-to-hand fighting. This skill applies to any attack rolls (based on Mecha REF) made in robot melee combat equivalent to the character's skill level in Mecha Melee. A pilot with this skill can mirror many physical moves (within design limitations) that he or she is personally skilled with and also use any mecha-sized melee weapons in equal to their personal Melee Weapons skill level (if any) to a maximum level of the Mecha Melee Combat. For example a pilot has a competent level of Mecha Melee skill and an expert level in Polearms. This combination means he can operate the robot using a mecha-sized polearm in combat but at a competent level. Having a novice level in Unarmed Combat (Jujitsu) still allows the pilot to translate this combat technique at the novice level as a mecha combat technique.*

## The Finishing Touches

The Mecha Stat block (Page 119) has everything the player and game master needs to run a mecha in an Action! System RPG session. The finishing touches allow a mecha creator to add the finer detail that mech-heads seem to love. The finishing touches to creating a mecha involves a second non-game stat block that irons out statistics such as dimensions, top air speed, and the names of weaponry. If the players and GMs like the thought of their mecha possessing a "Tarsis-4 Optical Tracking Solution" when describing the selected Sensors module then this section is where that description goes. The descriptive stat block will differ with each mecha and some examples will follow.

### Example Mecha Campaign Descriptions:

**Type:** The campaign world's name for the mecha.

#### Dimensions:

**Height:** See the Mecha Size chart for a guide.

**Length:** If a vehicle, the 'height' can be construed as the lengthways dimension instead.

**Width:** The dimension from left to right. Aerospace mecha could also have a wingspan included.

**Weight:** The Mecha Size chart has a weight range for the mecha based on size.

**Powerplant:** The name, type, and even horsepower/thrust-to-weight ratio.

**Operational Range:** Can be derived from the mecha creation rules. Power suits can take into account the average wearer's limitations. Most modern vehicles will have the "Reduced Endurance" Defect to simulate fuel use.

**Maximum Speed:** By using the tables provided in Step 4, the top speed of the mecha can be calculated. Modules such as "Mach Booster" will also warrant a mention in this descriptive section.

**Affiliation:** The vehicle may be an exclusive make from a specific nationality or company.

**Cost:** Depending on the type of campaign and also using the optional Mecha Cost section the mecha can have a price tag.

#### Other Description Options

The following list contains more examples of what can be described within a campaign.

- Operational Ceiling/Depth
- Oxygen Limits
- Food and Stores limit
- On-board Emergency Gear
- Cargo Capacity
- Manufacturer
- Weapons Names

#### Example

The staple of the Neo-York civil defense unit is the venerable CDT-34A "Starsky" built by HutchCORP. Being a wheeled tank with hard, puncture-resistant tires, the CDT-34A is a fast and manoeuvrable deterrent for civil disturbances. Unfortunately the brave souls who operate these tanks are in less than ideal situations when rogue nations flex their MechaKnight muscle and attack the city. CDT-34A's are little more than cannon fodder when facing the plasma ejectors common with invading MechaKnights.

**Vehicle Type:** Wheeled Civil Defense Tank

**Crew:** Two (pilot and weapon operator) plus up to 2 passengers.

**Speed:** 90mph on land (144kph), 10mph in water (16kph).

**Max. Range:** 660 miles (1056km)

**Weight:** 16.5 tons, **Length:** 24ft (7.3m), **Width:** 10ft (3m)

#### Equipment of Note:

Self-Contained cockpit with independent oxygen supply and circulation system.

Passive and active radar, 20 mile range (32km).

Optical enhancement: Infrared, thermo-imager, passive night sight, and telescopic. Range for all is 3000ft (1km).

Medium range, tactical radio — 100 miles (160km).

Phoenix 4 – Laser targeting System

Spotlight on left topside 90-degree rotation.

#### Weapons:

102mm, Recoilless Rifle

TRV-45X Main Laser Turret

Turret Mounted, .50 caliber, machine gun with rubber bullet option.



# Mecha Combat Section

Mecha action should be fast, exciting, and fun, just like battles between humans, but on a larger and more dramatic scale. This chapter provides rules for the situations that can occur when characters are piloting giant robots, wearing power armour, or zipping about in vehicles.

The number one rule of mecha combat is to make battles as dynamic as possible. Before any fighting starts, the GM should set the scene. For example, a giant robot battle could take place “downtown” ... but it is more interesting if the GM takes a few moments to describe the nearby landmarks: mention the rows of office towers, the natural history museum, the subway station, city park, and the hospital down the block. This isn’t just for atmosphere — it gives everyone tactical choices. Want to elude the enemy’s flying mecha? Smash your way into the subway station and take the fight underground. Mecha is sniping with a long-range weapon? Have an enemy mecha take cover behind the hospital, forcing the hero to choose between risking innocents and charging into range of the villain’s plasma whip. As a 20m robot strides down a busy street, people will scatter in terror, a city bus swerves off the road and crashes, victims cry for help. Maybe some player characters can drive the enemy off the streets and into the park to limit collateral damage, or stop to rescue civilians, or just get enraged and fight even harder to defeat their foes.

It’s also important to personalize a battle. Faceless foes have their place, but players will have more fun if mecha pilots get a chance to get to know their enemies. A few undercover operations or diplomatic missions to neutral powers can interrupt even total war, with the characters along as spies or military attaché, to give them a chance to meet the dashing enemy pilot at the embassy ball. Similarly, giant robot combat can be grimly realistic, but can also have the panache of medieval jousts or World War I dogfights, with the deadly enemy ace in her red-painted mecha, or the honorable foe willing to have his wingmen hang back to let him duel opponents one on one. There’s no reason why opposing pilots cannot talk over the radio or by view screen as they trade laser blasts and plasma bolts, and this will let characters use Negotiation and Persuasion Skills as well as their attack bonuses. Even if the players are shy about chatting with the enemy, a battle can be made more memorable by giving the heroes some quirky non-player character partners or wingmen, such as an arrogant, showboating rival or a nervous, inexperienced rookie.

## Getting Started

**Cockpit Access** takes a full-turn action to climb into a mecha’s cockpit and then a move action to activate its various systems so it can move and fight. It takes a full-turn action to get out of a mecha unless an escape pod or similarly expeditious device is used (see Design Modules).

**Vehicles and giant robots** can be entered with a move action and started with a second action. An exception is noted in a mecha’s description when it applies. *See the Start Up Time Defect.*

**Mecha suit** pilot’s time required to don armour depends on its start-up time. (One minute is 20 actions.) Hastily donned armour can cut the start-up time by half but pilot skill rolls are halved until a proper start-up time can be achieved.

**Very tall mecha** whose cockpit is in the head are assumed to have ladders or wire lifts that allow the occupants to reach them. A sufficiently agile pilot could leap into the cockpit, however.

## Basic Concepts

- Mecha use the ACTION! SYSTEM action and combat rules unless exceptions are specifically mentioned.
- “Mecha” refers to all sorts of mobile craft built with these rules.
- “Giant robot” applies to machines that are moving with legs, or slithering like snakes, or flying with flapping wings, or swimming with arms, legs, or tails.
- “Suit” applies to all mecha suits that mimic the wearer’s normal body form.
- “Vehicle” applies to all other machines: cars, tanks, trucks, jet aircraft, submarines, and so on. It also applies to giant robots that have transformed into vehicles.
- “Monsters” refer to mecha-sized creatures built using the mecha rules.
- All mecha inflict Lethal Damage whether it be Blunt or Penetrating. So a robotic mecha punching a human will automatically inflict Lethal damage.

## Facing and Firing Arcs

When dealing with mecha, the mecha’s facing (the direction it is pointing) is important. Facing indicates the direction in which the mecha is travelling (assuming it’s not moving in reverse). It can also determine which weapons aboard the mecha can be brought to bear on a target.

A fixed weapon built into a mecha can be mounted to fire in one of four directions — forward, aft (rear), right, or left — or be built into a partial or full turret, or an arm. A partial turret lets a weapon fire into three adjacent fire arcs (such as forward, left, and right), while a full turret or arm lets it fire in any direction. For mecha with weapons, a weapon’s arc of fire is given in the mecha’s description.

See the *Fixed Arc of Fire* or *Turret* weapon restrictions.

## Initiative

There are two options for determining initiative in mecha combat.

The first is individual initiative just as in normal combat, where each character rolls separately. This is probably the best method if most or all characters are aboard different mecha since it can result in a lot of delayed or readied actions as passengers wait for pilots to perform manoeuvres when used if characters are all aboard the same mecha. It is possible to have a negative Mecha Initiative attribute as a living organism almost always has a better chance at reacting faster than someone piloting a vehicle. A lightning fast computer brain is still limited by the physical chassis design of the mecha.

An alternative is to roll initiative for each mecha, using the mecha’s initiative modifier. This is particularly appropriate when

characters are in the same mecha, since it allows everyone aboard the same mecha to act more or less simultaneously.

## Mecha Sizes

Mecha use the same size categories as characters and creatures, as described in the Target Size Modifiers Table. GMs should be familiar with the size bonuses and penalties from the Core Rules since these apply to mecha.

### Modifying Target Numbers

In combat, the Target Numbers listed in the Difficulty and TN Table do not take into account the opponent's abilities. Rather than using the generic difficulty modifiers in melee combat, the Target Number for attacks against other characters is equal to the target's DEF (see Defensive Target Number). The target's base DEF is 10, to which modifiers may be applied.

## Changing Speed

A pilot can change the speed of his vehicle once each round as a free action. How easy or difficult this is to do depends on the vehicle and the amount by which the pilot wants to accelerate or decelerate. The vehicle's acceleration number denotes how many squares per round a vehicle may accelerate without the pilot needing to make a Pilot check. The pilot may alternately decelerate his vehicle by twice this amount without making a Pilot check.

Accelerating by more than the listed number (or decelerating by more than twice the listed number) requires a Pilot check. The TN depends on how much change in speed is being attempted and the check is modified by the vehicle's current speed and its handling rating. The three categories of difficulty in changes of speed are Moderate, High, and Extreme.

### Speed Categories

- **Cautious** speed is half or less of MOV attribute in metres per turn. Weapons can be fired with the same modifiers as being stationary unless they have the static restriction.
- **Cruising** speed is up to the mecha's MOV attribute in metres per turn.
- **Running** speed is up to twice the mecha's MOV attribute in metres per turn.
- **Sprinting** speed is up to three times the mecha's MOV attribute in metres per turn.

Once a mecha starts moving, it moves at the same speed each turn (on its pilot's Initiative) unless the pilot changes the speed. The pilot can increase or decrease a mecha's speed by one category per turn. Terrain modifiers in Hexes with designated obstacles may require a skill roll to traverse without failing a manoeuvre at high and top speeds.

### Altering Speeds

Category	TN	Effect
Moderate	15	2x speed categories
High	18	3x speed categories
Extreme	24	4x speed categories

For example, a sports car has a MOV/Terrain attribute of 60m/turn. From a stationary position, the driver can accelerate his speed to standard (MOVx2) with no pilot check, to with a Pilot check of 15, by 18 with a Pilot check of 20, and by 24 with a Pilot check of 30.

Likewise, if he was at a speed of 24 and wanted to come to a full stop, the character would need to make a TN 15 Pilot check for 2x the normal deceleration rate of 12.

Pilot checks to accelerate and decelerate are modified by speed modifiers and handling modifiers. The handling modifier for a vehicle can be determined by referencing its manoeuvrability, as shown on Table 9–5.

Ground vehicles, water vehicles, helicopters, and aircraft with VTOL may also pilot in reverse at quarter top speed and with a –8 to all Pilot checks. Before going into reverse, a vehicle must come to a full stop.

### Option: Time to maximum acceleration.

A quick check to see how long it “realistically” takes a mecha to reach its full sprint speed is possible by dividing the MOV attribute by the REF attribute. This means a sports car with a MOV 60 (top speed 216kph) and REF of 4 can reach top speed in 15 seconds or five, three-second Turns. Increase the REF a point for every Design module to do with speed, such as Booster or Swing wing design.

### Option: Relative Speeds – the Chase

A vehicle that is travelling at its top speed of 30m/turn must move 15 hexes on its turn (in a character scale). It becomes difficult to map out this speed on a map that only covers a dinner table. In most combat situations, all participants will be moving at similar speeds, so long-distance battles may use something called relative speed.

When using relative speed, the map is the moving object in the abstraction, even though the cars and jets are considered to be speeding through the game world. The strict facing that comes with wheeled travel requires one edge of the map to be designated the forward edge, or the direction in which the bulk of the participating vehicles are facing. For example, in a highway battle wherein a band of Bikers is attempting to beat a squad of Police to the wreckage of a downed cargo plane fresh from Columbia, the direction of the wreckage would be designated the forward edge of the map. The opposite side of the map is called the trailing edge.

A general sense of the terrain is also necessary, such as “gravel road,” “wide-open desert,” or “blackened four-lane freeway.” In the case of encounters set on a defined roadway, the map should indicate the edges of the road.

Bends and turns in the road can be dealt with as hazards when they come within the map area.

Redrawing the map every time the road bends is usually more trouble than it's worth.

Turn by Turn, the map can be redefined according to the new hazards, obstacles, and situations the roving combat moves through.

Obstacles such as wreckage, ruins, wildlife, and bystanders are moved across the map relative to the vehicles. Generally, this means that an object appears on the forward edge of the map and exits through the trailing edge.

The environment defined by the map can change from round to round, too. In a round where the combat crosses a bridge, the spaces to either side of the roadway suddenly become a fatal fall. Should the road later pass through a tunnel,

those same spaces become solid walls of rock. These sort of environmental effects can be used to create diode-surfing changes in action, as the priorities of characters in the encounter change from fighting to manoeuvring and back again.

Because the combat scale allows for using relative movement rather than absolute speed when tracking vehicles, a vehicle may move forward or backward on its turn relative to the other vehicles on the map. Even if the miniature car in your hand is falling back toward the trailing edge of the map, your character's turbo-charged vehicle alt form in the game universe is still careening forward at 90 to 100 mph.

When using relative speeds, a drastic change in speed categories may result in changes to the encounter. A vehicle that accelerates or decelerates drastically may exit the map area. If no vehicles close with the departing vehicle, then the vehicle can be assumed to have fled the scene. If other vehicles do pursue the departing vehicle, then you should clear the map at the end of the round and have each character enter the new map area from the appropriate direction, at the new speed category.

See the optional Chase rules provided on [page 193](#) for the game mechanics involved in Relative speed chases.

## PILOTING MANEUVERS

Manoeuvres are part of a vehicle's movement, carried out on the pilot's move action. Most manoeuvres require Pilot checks to accomplish.

Pilot checks are affected by speed modifiers and handling modifiers.

**Avoid Obstacle or Hazard:** When a vehicle at surface or air scale enters a space containing an obstacle or hazard, the pilot must make a Pilot check to avoid it. Obstacles are physical objects in the path of a vehicle that can cause damage, such as crates, boulders, disabled vehicles, fences, and structures. A hazard is anything in the path of the vehicle that could cause the vehicle to lose control, such as ice, oil slicks, vegetation, or small creatures. Hitting an obstacle causes collision damage, while hitting a hazard may cause a loss of control.

If the entire combat takes place in a hazard zone, the GM may simply apply a circumstance penalty to all Pilot checks during the combat.

Sample hazards and obstacles, and their TNs, are listed in the [Obstacles, page 197](#) section.

**Hard Turn:** You change your facing and direction of travel by 90 degrees without losing speed. This requires a Pilot check with a base TN of 15, +5 per additional hard turn per move. A vehicle must move straight for two squares between turns.

**Punching It:** Punching it means to accelerate a vehicle past its top speed by up to a quarter of its normal top speed. Every round a vehicle is punching it, there is a 10% cumulative chance that it will lose control. Additionally, all Pilot checks while punching it have a -4 penalty in addition to any normal speed and handling penalties.

**Sideslip:** A vehicle may move side to side without changing its facing by performing a sideslip. This manoeuvre moves the vehicle one square to the right or left and one square forward or backward. Only two sideslips may be performed per turn. No Pilot check is necessary.

**Soft Turn:** You change your facing and direction of travel toward one of the diagonals. No Pilot check is necessary. You must move straight for at least two squares between turns.

**Bootlegger Turn (Ground/water only):** A bootlegger turn allows a vehicle to change its facing by up to 180 degrees while coming to a complete stop. First, the vehicle may move any distance up to its speed for the round. Then the pilot must make a Pilot check for the facing change followed by a Pilot check to successfully decelerate to 0. Failure of just the facing change check means the vehicle only made it halfway in the turn but comes to a complete stop, while failure of just the rapid deceleration results in loss of control.

Aircraft and submersibles with VTOL may make bootlegger turns.

Facing Change	Pilot TN
45 degrees	5
90 degrees	10
135 degrees	15
180 degrees	20

**Jump (Ground/water only):** To make a successful jump, the vehicle must first move in a straight line a number of squares equal to one quarter its top speed. For jumps requiring height (such as jumping over a vehicle), some sort of object must be available to serve as a ramp or a bump (for watercraft this may be a wave). When using an improvised ramp or bump, make TN 15 Pilot check to maintain control of the vehicle. If this check fails, the character lands out of control.

The GM should set the TN of the jump manoeuvre between 15 and 30, depending on the difficulty. Remember that handling modifiers apply, so a semi-trailer, for instance, is unlikely to clear all but the smallest gaps.

## ATTACK MANEUVERS

**Ramming:** Ramming another vehicle requires that your vehicle occupy the same square as the enemy and that you make a Pilot check equal to the target's touch AC. Both vehicles suffer collision damage. Ramming another vehicle ends movement that round for the ramming vehicle; if it would have had movement left over, it can use the remaining movement to push the rammed vehicle forward one square per size category by which it is larger than the other vehicle.

**Slamming:** This manoeuvre can be used to damage vehicles and push them out of control. Just as with ramming, you must occupy the same square as the target vehicle and you must make a Pilot check equal to the target's touch AC. If you succeed, you do 1d6 points of damage to vehicles of the same size as you, plus an additional 1d6 per size category by which your vehicle is larger than the target vehicle. If you have movement left over after slamming the enemy vehicle, you may attempt to force the vehicle out of control. You and the enemy pilot make opposing Pilot checks. The larger vehicle receives a +4 bonus to the check for every size category by which it is larger than the other vehicle. If the slammer wins, he knocks the enemy vehicle out of control.

**Run Down:** Last but not least, a vehicle is at a very large advantage against a pedestrian or creature. Pilots may attempt to run down living creatures, or mecha two or more sizes smaller than the vehicle, by entering their squares and



making Pilot checks against their touch ACs. If the pilot wins, treat it as a collision. The creature takes full damage and the vehicle takes half damage after the size multiplier is applied. Most creatures that a mecha might run down can not penetrate a mecha's damage reduction; running down another mecha, however, subjects the attacking vehicle to nexus energy damage, to which the damage reduction does not apply.

## COLLISIONS

If a vehicle collides with something, it takes damage based on its current speed. If a vehicle collides with a moving object, such as another vehicle or an animal alt form, the GM must determine the net speed of the impact based on velocity and angle of impact.

### Collision Damage

Collision damage begins with speed. When colliding with a stationary object, both objects suffer MOVd6 damage, where MOV is the vehicle's current speed in metres per turn. Note that aircraft travel at much higher speeds and therefore suffer much more damage. When an aircraft collides with a stationary object, both objects suffer MOVd6x5 damage. Thus, collisions involving aircraft and spacecraft can be catastrophic. Damage to each object is calculated separately, multiplied by the size category of the other object in the collision.

Size of other Object	Damage Multiplier
Tiny	x1/4
Very Small	x1/2
Small	x1
Medium	x2
Large	x3
Very Large	x4
Huge	x5
Gargantuan	x6
Immense	x7

Collision with a moving object also depends on the angle of impact.

- If two vehicles were moving directly toward each other when they crashed, add their speeds together for the purposes of determining collision damage.
- If two vehicles are moving in the same direction and one rammed the other, subtract the lower from the higher speed. Use the difference to determine collision damage.
- If the target vehicle was moving perpendicular to the other, ignore the target vehicle's speed when determining collision damage.

## LOSING CONTROL

Collisions and failed manoeuvres can cause a pilot to lose control of the vehicle. If a vehicle goes out of control, a mishap occurs. Its severity depends on how badly the pilot failed the Pilot check that resulted in the loss of control.

- **Failed by 3 or less = Slip:** The vehicle slips sideways, loses traction, or swerves slightly. The vehicle completes any manoeuvre the pilot was attempting and moves its current speed. However, the pilot suffers a -3 penalty to all manoeuvres until he makes a successful Pilot check to regain control.
- **Failed by 4-6 = Slide:** The vehicle almost slides out of control. The vehicle only moves half its current speed and completes any attempted manoeuvre only halfway. If the pilot attempted an extreme acceleration or a hard turn, he only manages a high acceleration or a soft turn. If he was swerving to avoid an obstacle or hazard, he still clips or sideswipes it, taking half normal damage. The pilot also suffers a -6 penalty to all manoeuvres until he makes a successful Pilot check to regain control.
- **Failed by 7-11 = Spin:** The vehicle spins out of control, continuing on its previous path and direction and colliding with anything in its path. A spinning vehicle travels a number of squares equal to one-quarter its remaining speed for the round, then comes to a stop facing a random direction.
- **Failed by 12 or more = Roll:** An out-of-control vehicle may roll over. A rolling vehicle travels in a straight line along its previous course for a number of hexes equal to cautious movement, then comes to a stop facing in a random direction. Ground vehicles takes damage equal to the speed it was doing before losing control. Passengers take half this amount of damage, but may attempt a TN 18 Reflex attribute roll for quarter damage. Passengers that fail their Reflex saves by 6 or more and are not belted in some way are thrown from the vehicle for collision damage. There is a 50% chance that a rolled vehicle lands right side up (1-3 on 1d6 means it does).
- **Unknown:** If the vehicle was piloted out of control as a result of an opposed roll, use the difference of the opposed rolls to determine the mishap. If neither opposed rolls nor a failed Pilot check causes the mishap, the GM should assign a mishap using his best judgement.
- **Regaining Control:** The base TN to regain control after a mishap is 12. This is modified, however, by the penalty caused by the mishap as well as by any speed, hazard, terrain and handling modifiers.

## ATTACKING FROM A VEHICLE

A passenger attacking from a vehicle may make use of his own personal weapons or weapons mounted on the vehicle. Attack rolls are made with modifiers due to the vehicle's speed and actions taken by the driver.

A few new attack options are available to vehicle-based combatants:

**Piloting Defensively:** A pilot may choose to pilot defensively as part of an attack, earning a +2 DEF bonus to the vehicle for one turn. All attacks made from the vehicle suffer a -3 penalty.

**Total Defense:** A pilot can use the total defense action to garner a +4 DEF bonus to the vehicle by giving up his attacks. Passengers make attacks at a -6 penalty until the pilot's next turn.

## Actions Summary

Each character can perform one action in a Turn while piloting a mecha.

The Actions that a mecha pilot may perform are listed below according to the type of mecha that they are operating.

### If in a Mecha Suit

Mecha suit moves exactly like the wearer, except that the suit may have a movement modifier that applies to the wearer's speed and the distance he or she can jump, as well as a strength bonus. The wearer can perform any actions while wearing the suit, just as if he or she were wearing any other armour.

Run actions tire the wearer as usual; a suit may sometimes speed movement, but it is still fatiguing.

#### Guide to getting into and out of Suits

The time required to don mecha suits depends on its type; see Table: Startup Time for Suits

**Don:** This column tells how long it takes a character to put the mecha suit on. (One minute is 20 Turns.) Readyng (strapping on) a shield is only a movement action.

**Don Hastily:** This column tells how long it takes to put the suit on in a hurry. The REF attribute and therefore DEF for hastily donned mecha suits are each 1 point worse than normal.

**Remove:** This column tells how long it takes to get the mecha suit off. Loosing a shield (removing it from the arm and dropping it) is only a move action.

**Cost:** This is the Start-Up Time refund in mecha points.

#### Table: Start-up Time for Suits

Mecha Suit Example	Don	Don Hastily	Remove	Cost
Arm-held Shield (any)	1 move action	n/a	1 move action	n/a
Hi-Tech Self Activating Suit, Mystical "Phase-in" armour	1 minute	10 turns	1 minute <sup>1</sup>	- 1 MP
Heavy Duty Military Drop Suit, Ceremonial application of symbols before summoning armour.	4 minutes <sup>1</sup>	1 minute	1 minute <sup>1</sup>	-3 MP
Civilian Industrial Powerlifter, pulp-era microsteam armour-frame.	4 minutes <sup>2</sup>	4 minutes <sup>1</sup>	1d6 minutes <sup>1</sup>	-4 MP

1 If the character has some help, cut this time in half. A single character doing nothing else can help one or two adjacent characters. Two characters can't help each other don their respective suits at the same time.

2 The wearer must have help to don this suit. Without help, it can be donned only hastily. The MP cost reflects this added burden to the wearer as a "Service Crew" refund.

### If in a Vehicle

The Assembler Core has all the basic ground vehicle-based rules needed for running combat. Here is a summary

#### Choose Speed

The pilot may increase or decrease his or her mecha's speed category by one (or keep it the same).

#### Optional Attack Action

If the pilot wants, he or she can use his or her attack action before moving the mecha. If the pilot does so, however, he or she will be limited to a single extreme manoeuvre during movement.

#### Movement

The mecha moves at a speed determined by its MOV/Type attribute. Along the way, perform any number of simple manoeuvres (limited only by their movement cost). The pilot may also attempt an extreme manoeuvre as part of the movement (or two, if the pilot didn't take his or her attack action before moving).

#### Terrain Modifiers

The Assembler Core has some handy modifiers for vehicle movement.

#### Optional Attack Action

If the pilot did not take an attack action before moving, and performed one or fewer stunts, the pilot has an attack action left.

### If In a Giant Robot

#### Agility

A giant robot can move either as a vehicle or as a character. It can only move as a character if it moved no faster than a MOV equivalent to 110m on the previous turn, and if it uses land speed. If moving as a character, its pilot may have the robot perform any actions a living creature of the same size and shape could — using the normal rules for character action, with these three exceptions:

- **Movement:** The giant robot follows ACTION! SYSTEM vehicle rules when moving faster than 110 meters per Turn. Another option is to use the Hex Combat rules.
- **Running:** The pilot does not tire from running.
- **Melee Combat:** The pilot needs to be skilled in Mecha Melee Combat before any pilot bonuses can be applied to melee combat.

#### Change Weapon, Ammunition or RoF Selection

Any of these options will take an action/turn to perform. Usually the mecha can engage in a movement action while this is taking place. Any defensive moves made will halt these options until the next turn (e.g. dive for cover).

#### Basic Robot Offensive Actions

- **Attack:** Use any type of attack (punch, firing a gun, swings a sword and so on). Roll 3d6 + REF + Mecha Combat/Melee Skill. If the total is equal to or higher than the target's Defense, the attack hits the target.
- **Aim:** By taking time to aim, pilots can offset some or all of these range penalties. For each full turn spent aiming a weapon (and nothing else), the pilot receives a bonus of +2 to his skill roll. The maximum bonus is +6.
- **Grab:** Grab an opponent or object; Mecha Combat skill roll is at -2, and Mecha DEF is at -2 this Turn.

- **Throw:** Throw a person or object (-4 to the skill roll if the object isn't made for throwing).

### Basic Robot Defensive Actions

**Block:** Stop a hand-to-hand attack. The Target Number is equal to the total of the attacker's skill roll (REF + Mecha Combat Skill + 3d6). If a mecha performs a Block, the player may roll to block any unarmed or melee attacks until the mecha's next Action.

**Dodge:** Add +3 to your mecha's Defense for this Turn; your mecha may not attack this Turn.

### Basic Robot Movement Actions

Mecha movement can be described in either MOV attributes or stated top speed of the mecha (e.g. fly at Mach 1.5). See the Hex movement options in detail starting page 199.

**Move:** Move up to your Move score in meters, plus take one other non-movement action.

**Cautious Movement:** allows a mecha to fire weaponry as if it were prone while still traversing up to half MOV.

**Run:** Move up to 2 × your mecha's Move score.

**Sprint:** Move up to 3 × your mecha's Move score; your mecha's Defense is only the base Mecha DEF bonus/penalty (i.e., players cannot add the pilot's REF score to Defense).

**Jump:** A Bipedal or Animal Mecha without the Jumping module can dive, upwards or across, one half its STR score in meters.

**Change Stance, Change Mode:** Your mecha can change from laying down to kneeling or standing up, and vice versa or perform a single stage transform into another mode. Your mecha may take one other non-movement action.

**Zigzag Run:** When attempting to lower the mecha's chances of getting hit while charging, the mecha can perform a Zigzag run. This can only be done while running or sprinting, gives an additional +3 DEF bonus, but cuts the actual amount of hexes able to be moved by half.

### Other Mecha Actions

#### Other Action

Any other single action that the GM lets your character perform. It cannot be an impossible action and contravene the campaign's realism level.

#### Hold Action

Your mecha pilot is waiting to act and may take an action on any initiative number below the initiative number rolled. If a mecha pilot is holding an action and then wants to act before another character on the same initiative number, the player must roll the mecha's REF + 3d6. If the total is higher than the opposition's REF + 10, the mecha may act first. Otherwise the mecha acts after the other character has acted.

### Riding and Jousting

See the Gunslinger Rules for riding a mount. Treat the mecha the character rides (such as motorcycles) as an untrained mount unless it has an artificial intelligence. Characters, in accordance with the Assembler Core rules, may perform riding actions with their mecha. Treat Riding Actions as "Movement" for the purposes of determining any penalties imposed for characters performing multiple actions in a single turn.

### Extended Chases

See the optional chase rules for a version of combat at relative high speeds on page 193.

## Combat Modifiers

A variety of situations can affect a skill roll made to hit a target in combat. For example, skill rolls for ranged attacks are modified by the distance, size, and speed of the target. If a target is close, it will be fairly easy to hit. If a target is far away and moving quickly, it will be much harder to hit.

### DEF Modifiers

There are a number of situations that affect a character's DEF score and, therefore, an attacker's TN. Some examples and suggested DEF modifiers are listed below. All listed modifiers are applied to the target character's DEF score.

Character/target is...	DEF Modifier
aware of attack	+ REF
using a combat skill to defend	+ Skill score
at optimal distance for his weapon and fighting an opponent with a different length weapon	+3
Diving or Dodging	+3
Blocking or Rolling	+2
Grabbing another character	-2
Armour & Encumbrance	
Unencumbered (< STR kg)	No modifier
Partially encumbered (< Carry wt.)	-1
Greatly encumbered (> Carry wt.)	-3

### Combat Modifiers

A variety of situations can affect a skill roll made to hit a target in combat. For example, skill rolls for ranged attacks are modified by the distance, size, and speed of the target. If a target is close, it will be fairly easy to hit. If a target is far away and moving quickly, it will be much harder to hit.

Some examples and suggested modifiers are listed below. All listed modifiers are applied to the skill roll for the attack.

Target Size	Modifier	Distance	Modifier
Immense	+14	1 meter	0
Gargantuan	+12	2-3 meters	-1
Huge	+6	4-5 meters	-2
Very large	+4	6-15 meters	-3
Large	+2	16-25 meters	-4
Medium (human)	0	26-35 meters	-5
Small	-2	36-50 meters	-6
Very small,	-4	51-100 meters	-7
Tiny	-6	101-150 meters	-8
Fine	-8	151-200 meters	-9
<b>Aiming</b>	<b>Modifier</b>	201-300 meters	-10
Aiming	+2/turn (+6 max)	301-400 meters	-11
Braced (stable base, bipod, pintle mount)	+2	401-600 meters	-12
Hip shot	-2	601-800 meters	-13
<b>Miscellaneous Conditions</b>	<b>Modifier</b>	801-1,000 meters	-14
Surprise Attack	-5	1.0-1.5 km	-15
Improvised weapon	-2	1.5-2.5 km	-16
<b>Target Moving</b>	<b>Modifier</b>	2.5-3.5 km	-17
3-4 m/turn (walking)	-1	3.5-4.5 km	-18
5-8 m/turn (jog)	-2	4.5-6.5 km	-19
9-16 m/turn (running)	-4	6.5-10 km	-20
17-32 m/turn (sprinting)	-6	10-14 km	-21
33-64 m/turn (24-42 mph)	-8	14-20 km	-22
65-128 m/turn (highway speeds, train)	-10	20-27 km	-23
129-256 m/turn (small plane, helicopter)	-12	27-35 km	-24
257-512 m/turn (racing car)	-14	36-50 km	-25
513-1024m /turn (passenger jet)	-16	51-100 km	-26
1025-2048m /turn (F-18, sound barrier)	-18	101-150 km	-27
2049+ /turn (F-15 on afterburners)	-20	151-200 km	-28
<b>Target Visibility</b>	<b>Modifier</b>	<b>Distance</b>	<b>Modifier</b>
Completely obscured/invisible	-5	201-300 km	-29
Mostly obscured (heavy fog, good cover)	-3	301-400 km	-30
Partly obscured (light fog, poor cover)	-1	401-600 km	-31
<b>Target Behind Cover</b>	<b>Modifier</b>	601-800 km	-32
Half body visible	-1	801-1,000 km	-33
Head and shoulders only visible	-2	1,000-1,500 km	-34
Head only visible	-3	1,000-2,500 km	-35
Target silhouetted	+2	2,500-3,500 km	-36
<b>Elevation</b>	<b>Modifier</b>	3,500-4,500 km	-37
Target higher (uphill, mounted)	+2	4,500-6,500 km	-38
Target lower (downhill, prone)	+1	6,500-10,000 km	-39
		10,000-14,000 km	-40

## Action Modifiers

A number of actions that are available to characters impose a modifier to a skill roll, the character's DEF or both. Below is a condensed list of available actions and their modifiers.

For a more detailed description of each action, see Available Actions. Note: "Skill Mod" represents the modifier to the attacker's skill roll to perform that action.

		Skill	
Defensive Actions	DEF	Mod	Notes
Block	+2	+1	+4 INI vs. melee attacks next turn if block is successful
Dodge	+3	+0	Up to ½ MOV in meters
Roll with the blow	+2	+0	½ damage
		Skill	
Movement Actions	DEF	Mod	Notes
Crawl	+1	+0	No REF bonus to DEF
Climb	+0	+0	Up to ½ MOV
Dive	+3	+0	Up to ½ STR; req. Leaping roll (TN 10 +2/ meter)
Roll	+2	+0	Roll along ground or over obstacle; up to ½ MOV
Run	Var.	+0	Up to 2x MOV plus one non-movement action at -3; DEF bonus for velocity
Sprint	Var.	+0	Up to 4x MOV; plus one non-movement action at -6; DEF bonus for velocity
Walk	+0	+0	Up to MOV plus one other non-movement action
		Skill	
Offensive Actions	DEF	Mod	Notes
Aim	+0	+2/turn	+2 per turn (+6 max); No REF bonus to DEF
Bind Weapon	+0	-1	Opponent's weapon immobilized; requires contested (STR + combat skill + 3d6) to

Disarm	+1	-2	break.
Drag	+0	+0	Disarms opponent
Drop	+0	+0	Drag resisting person (STR+1 - opponent's STR) meters; max distance = MOV.
Grab	-2	-2	Fall with Grabbed or Restrained opponent; 2d6 dmg
Restrained	+0	+0	Grab one item or limb.
Take-away	+1	-3	Fully restrains a Grabbed character; -2 to overcome.
Throw	+1	-1	Takes opponent's weapon away.
Unarmed Strike	+0	+0	Inflicts normal STR dmg as B/S; victim thrown to ground
Weapon Strike	+0	+0	Does STR damage as B/S
			Does dmg as per weapon

#### Skill

Special Actions	DEF	Mod	Notes
Fast Draw	+0	-3	+2 INI
Load Weapon	+0	+0	Load a weapon & make ready
Mount	+0	+0	No REF bonus to DEF
Wait	+0	+0	Wait to act later in same turn

## Target Cover and Visibility

When a character fires from a mecha, objects or other mecha in the way can provide cover for the target. Use the normal rules for cover and concealment, bearing in mind the size of the mecha. Thus, a medium-sized suit could take cover behind a tree, but a Very Large robot could not. A few specific considerations:

### Concealment vs. Sensors

Concealment is ineffective if sensors used by the attacker can see through it. For example, normal smoke is ineffective against radar or infrared, so provides it no concealment. Mecha pilots usually rely on sensor systems to target an opponent.

### "Hull Down" Vehicles

A common tactic for tanks and similar vehicles (or giant robots with weapons mounted in their heads) is to be "hull down" behind a ridge or submerged with only the turret or head exposed. This is "head and shoulders" cover (-2)

### Using the Sun

Even in historical warfare there have been armies that time their attacks so that they charge with the sun at their backs and their enemies looking into the blinding light. It was also a favorite tactic for prop aircraft warfare in WW2. The effectiveness of using solar glare is somewhat diminished with modern radar systems however it is perceivable that an active stealth aircraft could use similar tactics to hide from the enemy and radar prior to attack. A blinded target loses its REF bonus to DEF.

### Submerged Mecha

A mecha that is moving underwater is treated as a mecha with no stall speed, but otherwise uses the same rules as a flyer, and keeps track of depth the same way. The speed increase while diving, however, is limited to double speed or 75m/turn, whichever is less. It cannot climb above the surface, or safely dive below its rated dive depth.

With nothing for sensors to bounce wavelengths off, radar, visual and (to most extent) thermo-imaging will not detect a submerged or buried mecha. How far you can see underwater depends on the water's clarity. As a guideline, creatures can see 3d6×5 meters if the water is clear and 2d6×2 meters if it's murky. Moving water is always murky, unless it's in a particularly large, slow-moving river. Sonar is purpose designed for detecting objects underwater but only active pings (the use of noise to induce an echo) will provide enough information for sensors. Active pinging is a massive beacon for opponents with similarly equipped sonar hence all the submarine movies show it is imperative that they run "silently." An invisible creature or cloaked mecha displaces water and leaves a visible, body-shaped "bubble" where the water was displaced. The displacement can be spotted with a successful Awareness skill roll at -5. Characters may make attacks against the mecha or creature but still suffer a -5 penalty to the skill roll.

### Thermo-imaging and snow

There are major benefits and drawbacks to heat sensors in sub zero conditions. On one hand a lone, retreating tank could feasibly plough into a snowdrift with its operators jamming snow into the engine bay in an attempt to hide its thermal signature. Hiding in snow and frozen lakes is an excellent method of avoiding thermal sensors. On the other hand, if that same tank was charging across the tundra back to friendly lines and a tank-buster aircraft were to pass over, that tank would light up the thermal sensors like a Christmas tree (GM assigned bonus to attack).

### Fog

Whether in the form of a low-lying cloud or a mist rising from the ground, fog obscures all sight, including night vision. Light fog imposes a -1 penalty to sight based sensor and ranged attack skill rolls versus targets beyond 5 meters, medium fog imposes a -3 penalty versus targets beyond 3 meters, and dense fog imposes a -5 penalty versus targets beyond 1 meter. Fog does not disrupt radar and thermo-imaging.

## Wrecking Buildings

Characters can hit buildings automatically with melee attacks. Buildings should be given HITs and Armour depending on their size and construction.

If the building is reduced to 0 or fewer HITs, it is wrecked and systems in it (power, phone lines, etc.) stop working; if it drops to its total HITs below zero, some parts of it collapse.

Anyone in or adjacent to a collapsing building takes damage equal to 1d6 for every 20 HITs the building possessed originally plus 2 per point of Armour. A TN 15 Reflex check to leap out a window or find an appropriate structural member to shelter under may negate or halve damage if the GM feels it is possible.

Wooden buildings count as having the Flammable Defect. A villain's secret base is usually Volatile.

## Wrecking Buildings- Collapsing

Type of Building	Size	HITs	Armour	Damage
Phone Booth	Large	20	2	1d6+4
Wood Shed	Very Large	40	4	2d6+8
Outdoor Garage, Bungalow	Huge	60	6	3d6+12
Concrete bunker	Huge	80	20	4d6+40
Large house	Gargantuan	100	10	5d6+20
Small office building	Gargantuan	120	14	6d6+28
Mid-sized office building	Immense	160	16	8d6+32
Fortress, large skyscraper	Immense	240	24	12d6+48

## Mecha Strength Damage

If the mecha is using its Strength to attack, then roll a number of dice equal to ½ the STR attribute score (any fractions become +2; e.g., a mecha with a STR of 25 would roll 12d6+2 for damage when punching).

The total rolled on the dice is the amount of damage caused by the attack.

### Mecha Strength Range Chart

The following table is a quick reference for the players and GMs. See the Assembler Core for an extended Strength table.

Score	Drag	Dead Lift	Carry	Damage	Example of Dead Lift Weight
0	0	0	0	0	
1	10 kg	5 kg	2.5 kg	1d3	Infant's weight, M1 Garand, shot-put
2	50 kg	25 kg	12.5 kg	1d6	Child's weight, full suitcase, 27" TV set
3	100 kg	50 kg	25 kg	1d6+2	Adolescent's weight
4	200 kg	100 kg	50 kg	2d6	Average man's weight
5	300 kg	150 kg	75 kg	2d6+2	Football lineman's weight
6	400 kg	200 kg	100 kg	3d6	Sumo wrestler , GBU-12 (500-lb bomb)
7	500 kg	250 kg	125 kg	3d6+2	Large black bear, large stag
8	600 kg	300 kg	150 kg	4d6	Grand piano, small nuclear warhead
9	700 kg	350 kg	175 kg	4d6+2	120mm mortar, large wooden canoe
10	800 kg	400 kg	200 kg	5d6	Motorcycle, sailboat, female polar bear
11	1,200 kg	600 kg	300 kg	5d6+2	Male polar bear, camel
12	1,600 kg	800 kg	400 kg	6d6	Small trailer
13	2,400 kg	1,200 kg	600 kg	6d6+2	Economy car
14	3,200 kg	1,600 kg	800 kg	7d6	Mid-size pickup, mini-van
15	4,800 kg	2,400 kg	1,200 kg	7d6+2	Luxury car, van
16	6,400 kg	3,200 kg	1,600 kg	8d6	Truck
17	9,600 kg	4,800 kg	2,400 kg	8d6+2	Large ship's anchor
18	12.5 tons	6,400 kg	3,200 kg	9d6	Armoured limousine, Tyrannosaurus
19	18.75 tons	9,600 kg	4,800 kg	9d6+2	Killer whale (male)
20	25 tons	12.5 tons	6,400 kg	10d6	Subway car, male African elephant
21	37.5 tons	18.75 tons	9,600 kg	10d6+2	Fighter jet (unloaded), street car
22	50 tons	25 tons	12.5 tons	11d6	Fighter jet (loaded), Small rocket
23	75 tons	37.5 tons	18.75 tons	11d6+2	Gray/humpback whale, T-54/55 tank
24	100 tons	50 tons	25 tons	12d6	M60A1 tank, amphibious assault vehicle
25	150 tons	75 tons	37.5 tons	12d6+2	M1A1 tank, armoured rail road container
26	200 tons	100 tons	50 tons	13d6	757, space shuttle, blue whale
27	300 tons	150 tons	75 tons	13d6+2	Cargo jet capacity, C-5A Galaxy (empty)
28	400 tons	200 tons	100 tons	14d6	767, SRN4 hovercraft
29	600 tons	300 tons	150 tons	14d6+2	Galleon, C-5A Galaxy (fully loaded)
30	800 tons	400 tons	200 tons	15d6	747, trawler
31	1.2 ktons	600 tons	300 tons	15d6+2	
32	1.6 kt	800 tons	400 tons	16d6	Drilling rig
33	2.4 kt	1.2 ktons	600 tons	16d6+2	
34	3.2 kt	1.6 kt	800 tons	17d6	Small bridge
35	4.8 kt	2.4 kt	1.2 ktons	17d6+2	Hydroelectric generator
36	6.4 kt	3.2 kt	1.6 kt	18d6	Destroyer
37	9.6 kt	4.8 kt	2.4 kt	18d6+2	Freight train, lighthouse
38	12.5 kt	6.4 kt	3.2 kt	19d6	Nuclear submarine
39	18.75 kt	9.6 kt	4.8 kt	19d6+2	
40	25 kt	12.5 kt	6.4 kt	20d6	Freighter (empty)

## Throwing Heavy Things

Mecha with a high strength attribute can lift heavy things and throw them to deliver damage. It takes one action to grab and lift a large, awkward object, and another to throw it. Consequently, throwing objects is slower than firing most weapons. The advantage of throwing an object is that big things are harder to dodge than smaller ones. The GM should assign each object a size category based on its size and weight.

The attack delivers damage, and receives an attack roll bonus, based on the size of the object. The attacker's Strength modifier plus any bonuses increase the damage for Massive Damage.

### Throwing Damage Bonuses

Size Category	Damage (*)	Attack Roll Bonus
Medium	2d6+2	0
Large	4d6+4	+1

Huge	6d6+6	+2
Gargantuan	8d6+8	+4
Immense	10d6+10	+8

\* Plus the attacker's Strength modifier and any other bonuses

## Hit Locations

When a Mecha strikes an opponent in combat players may want to know precisely where the attack lands. To determine the "hit location," players roll the combat dice and refer to the *Hit Location Table*, below.

Once hit location is determined using the *Hit Location Table*, the player may still "move" the location. For every 2 points of effect number, the player may move the hit location up or down one location on the table (player's choice).

### Targeting Specific Locations

If your mecha pilot wants to attack a specific part of the opponent, players can use the Aimed Shot modifier on the table below. Ignore the Random Hit Roll Column and apply the listed TN modifier to the TN for the attack roll. If the attack is successful, the mecha automatically hits the intended location; roll the damage for the attack including the damage effect on the table. Game masters can also briefly describe the mecha or show them a picture (for the licensed materials or artistes) and allocate an aimed shot modifier.

### Hit Location Table

This table gives players a reasonable idea of what to aim at or what systems can be hit during combat.

Roll	Humanoid	Aerospace	Vehicle	Damage Effect**	Aimed Shot ***
3-4	Head	Nose	Fuel Tank	2x damage	-4
5	Neck	Cockpit	Drive Mechanism	1½ × damage	-6
6	Hand/Weapon*	Weapon Mount*	Weapon Mount*	½ damage	-3
7-8	Shoulder *	Wing*	Front Wheel(s)*	½ damage	-2
9	Arm*	Fuselage Weapons	Door*	½ damage	-2
10-11	Upper Torso	Fuselage	Chassis	No Modifier	-1
12	Lower Torso	Engine Mount	Engine Mount	No Modifier	-4
13	Vital system	Vital system	Window/Viewport*	1½ × damage	-6
14-15	Upper Leg*	Tail Wing*	Rear Wheel(s)*	½ damage	-2
16-17	Calf/lower leg*	Rudder*	Head/Tail Lights*	½ damage	-4
18	Foot/Thruster*	Thrusters	Bumper	¼ damage	-3

\* Roll 1d6; 1-3 = left, 4-6 = right.

\*\* After subtracting points for any armour

\*\*\* Once hit location is determined using the Random Hit Location Table, the player may still "move" the location. For every 2 points of effect number, the player may move the hit location up or down one location on the table (player's choice).

## Guided Missile Combat

Missile combat has been given its own section to allow for greater options for the game master during combat. The missile, once fired becomes it's own entity in the combat arena allowing the mecha to continue the combat next turn. Guided missiles can also be construed as magical devices and not just the modern definition.

The weapon fires a projectile that homes in on its target. Missiles are described by their *Mode* of guidance, *Speed* (Spd), *Effect* (Eff) and *Target Lock Duration* (Dur). Once fired, the missile is an entity separate from the mecha or weapon's platform that fired it.

### Guidance Mode

The mode is the manner in which a missile is guided to the victim. The attack roll (Mecha Combat Skill + REF + 3d6 vs Target DEF + ECM) must be successful (commonly called a Lock). Once a lock-on is achieved, launching the missile is a free attack action next turn. The missile is always considered to have the highest initiative for that Turn and the firing mecha is still required to roll initiative for its actions. Once a Lock is achieved and the pilot decides to fire, treat the missile and mecha as separate entities. Once a missile is fired at a target, the victim must make a REF + ECM ± Size DEF modifier evasion roll using a target number based on the missile's mode (the TN for each mode is listed in parenthesis). This roll is made immediately upon successful acquisition of the target. A failed lock-on roll means the missile has not achieved lock and the missile will automatically miss if fired.

Depending on the campaign, most mecha have the means to detect a weapon system attempt at acquiring a lock. Game Masters may require an accessory module to be bought where the player will only receive a non-directional warning that a missile lock is being attempted. Mecha with proper sensor systems built as modules will get extra information regarding where the lock is originating from and even what type of weapon is attempting to target.

#### Stationary Targets

Bunkers, docked vessels or other such non-mobile structures can defend against missiles either by shooting the missiles down or by extensive Electronic Countermeasures (ECM) designed to throw missiles off their targets. If such ECM equipment existed, the counter-missile operator would roll an Operate Electronics + INT + 3d6 check against the missile's Mode TN. Smart Missiles would only be fooled by visual illusions that would fool normal sight.

#### Point Blank or Blind Firing

If the operator chooses to fire a missile without first allowing a lock to be successfully set or if the target is right in front of the mecha's missile launchers, the pilot may attempt to use the missiles as dumb-firing projectiles. The bonus to this method is that there is no sensor lock-on warning for the enemy to avoid and the situation becomes a typical combat round. The downside of point blank firing is that the attacking mecha receives half damage from explosive missiles. Blind firing can be caused by sensor disruption or similar where the pilot is forced to attempt aiming the missiles by "feel" (possibly aided by some mathematics skill) and firing the missiles on an intercept course. Again, since there is no sensor warning the attacker must react normally in combat on the turn the missiles will intercept (see Spd Attribute).



### **Mobile Operator-Guided (TN 18)**

The weapon fires a missile that is steered toward the target by the attacker, transmitting commands via a wire or a tight-beam radio link. Operator must concentrate on guiding the missile at the expense of piloting (no REF or defensive bonuses to the mecha while the operator is guiding). If the mecha operator firing the missile is not the pilot, then any defensive actions made by the pilot that changes a hex facing would require skill roll against the missile TN + 3 per changed hex facing to keep the missile on target.

### **Fixed Structure or Spotter-Guided (TN 15) + Guider's Skill**

The weapon fires a missile that homes in on reflected laser light. Launching the missile is an attack action. The missile will fly straight-ahead. At any point in its flight, the spotter (who is usually not in the mecha) must use an attack action each turn to aim a Laser Designator on the target. The target must be in front of the missile (if the missile has already flown past it, it will automatically miss). The missile closes on the target as long as a character continues to designate the target with a laser; if interrupted, the missile automatically misses. If the designating character is injured/distracted, a Concentrate Skill check is required to stay on target (as if casting a spell). Laser Guided missiles usually have a Dur attribute of 1, as the human spotter cannot reacquire the target fast enough.

### **Semi-Active Radar Homing or SARH (TN 18)**

The weapon fires a missile that homes on radar reflections emitted by the mecha's own radar. The mecha must have a Radar, High-Res Radar, or Meta-Scanner. Once fired, the Radar must continue to track the target or the missile will automatically miss, but no other character actions are required; if the Radar only faces forward, the mecha must stay pointed at the enemy. As long as it does so, the missile closes on the target.

### **Infra-red Homing or IRH (TN 18)**

The weapon fires a missile that tracks the target's heat emissions. The attacker must lock onto the target (mecha combat skill roll). If the lock on fails, it can be attempted again depending on the missile's Dur attribute. The missile will follow the target with no further intervention required. ECM or concealment effective against infrared will penalize the attack.

### **Radar Homing or ARH (TN 21)**

The missile uses its own on-board radar. Treat as Infrared Homing, except that ECM or concealment effective against radar will penalize the attack.

### **Sonar Homing or SH (TN 15)**

The missile — a torpedo — uses its own on-board sonar. It can only be fired at underwater targets. Treat as Infrared homing, except that ECM or concealment effective against sonar will penalize it.

### **Emission Homing or EH (TN 18)**

The missile is an "anti-radiation" missile that homes in on the radiating emissions of an operational Radar, Radio, or Radar Jammer; the mecha should have a Radar Sensor to spot such targets. Treat as IRH, but it can only lock onto a target that is using a Radar, Radio, or Radar Jammer. If the target turns off the system before the missile can reach it, the missile will still home on the last known location (unless the target moves, it is still in trouble).

### **Inertial or Satellite Guided (TN 21)**

The attacker programs in a set of map coordinates and the missile homes in on that point. This is only good for attacking stationary targets such as buildings and the TN is for ECM operators to roll against. Satellite guidance is only effective if the mecha has access to a friendly GPS satellite system. Inertial Guided missiles lose double their Dur attribute when successfully counter-measured.

### **Smart Missile Systems (TN 24)**

The missile acts like a homing missile however the target can never be a "friendly." Smart missiles rely on Identification Friend or Foe (IFF) or some form of visual recognition software, are considered rather "high-tech," and may not be available in some modern campaigns. Smart Missiles also gain a bonus +1 to their Dur attribute.

### **Homing**

The GM may allow players to create other specialized homing missiles, such as ones that home on magical emanations. Use the previous guidance systems as a guideline.

### **Effect (Eff)**

The Effect (abbreviated "Eff") represents the amount of damage or other effect caused by the missile. This is expressed as a Damage Rating (DR), which represents the number of d6's. The effects of DR are chosen as per the Weapon Damage Type step (see [page 154](#)). A DR10 can also be rolled as 1d6×10. Damage Effects can also be altered with Qualities and Restrictions. Special Attack weaponry can opt to take the *Missile Weapon System* restriction.

### **Speed of Missile (Spd)**

Speed (abbreviated "Spd") measures how quickly (in Turns) the missile will reach its target in an abstract manner and therefore shows how many evasive manoeuvres the target can perform before getting hit. A missile with a Spd of 2 would only give a target mecha 2 turns at avoiding the incoming missile once a Lock is achieved. This is to prevent complicated math to calculate distance vs speed vs manoeuvring. For long distance cruise missiles the Speed can be used to derive a MOV attribute to calculate how long it would take to reach a beyond-horizon target.

While the target is evading missiles there is no Pilot REF bonus to the mecha's DEF for any other attacks aimed at the evading mecha.

A Spd of 4 is the standard missile speed. This means in typical mecha combat, a missile will reach its target within 16 seconds of being fired. A modern missile can reach speeds in excess of Mach 2 and would therefore travel around 9.6km (6 miles) in those 16 seconds. This is regarded as the fringe of combat range with cinematic mecha combat. An evasion can include firing countermeasures or physically manoeuvring the mecha away from the missile.

### **Short Range firing**

If the mecha pilot decides to fire the missile while the target is closer than nominal, the target mecha only has half the chances of avoiding (round up). However since the missile does not have much of a chance to correct itself, if evaded,

the missile loses half its Duration attribute (rounded up). For example, a missile, with speed 2 and Dur 2, fired at short range means a mecha only has one chance at evading. However if the target does dodge the missile guidance system the missile has no chance at reacquiring as the Duration attribute is halved to 1.

Spd	Realistic Air Speed*
6	MOV 500
5	Mach 1 (approx MOV 1000)
4	Mach 2 (approx MOV 2000)
3	Mach 3 (approx MOV 3000)
2	Mach 4 (approx MOV 4000)
1	Mach 5 (approx MOV 5000)

\* Does not include space-borne or water torpedoes. But the speed chart can still be used.

## Lock Duration (Dur)

Duration (abbreviated "Dur") is the total amount of times that a missile can acquire a target acquisition after it is fired at the victim. The missile has a chance to reacquire an evading target after a successful roll against the missile's TN. Until the missile has been evaded it can still be considered "live." The problem lies with the Guidance Mode and whether the missile is smart enough to discern from friend and foe. An evaded IRH missile could just as easily lock onto a nearby friendly mech's engine output.

The default Missile Lock Duration is 1. This means that once its target has evaded a missile it is rendered useless and becomes a game special effect. Every Duration above 1 adds an additional attempt at locking onto a target before the missile's fuel runs out or it exits the combat arena. Successfully locking onto the target requires the target to make another evasive or ECM roll against the missile's guidance TN.

## Shooting a Missile Down

In any action where the missile is heading toward the target but has not reached it yet, the target has the opportunity to try and shoot it down. The Range table below determines the Target Number. If a weapon is capable of dealing 15 points of damage and hits the missile, the missile is considered "destroyed", and the target safe. No damage roll is necessary (unless playing ultra-realistically). Incoming missiles are easier to hit than missiles flying away from or tangential to, the shooter. Use the standard speed, target size and distance tables for attempting a shot at *outgoing* missiles. Purpose-built anti missile systems, can use the "Cone" rules (page 159) to simulate a wall of lead or laser spreading out in an attempt to tag an incoming missile.

Incoming Missile Range	TN Difficulty
Extreme Range of Anti-missile Weapon	Extreme (27)
Long Range	Demanding (24)
Medium Range	Difficult (21)
Short Range	Challenging (18)
Point Blank (take half damage)	Tricky (15)

# Mecha Damage

## Taking Damage

When a mecha is hit by an attack, players can subtract their mecha's AV from the points of damage from conventional attacks. Any left over damage points are subtracted from the mecha's HITs.

When a mecha's Hits are reduced to 0, the mecha is presumed disabled. "Disabled" can mean several things, depending on the nature of the mecha and the GM's judgment. A "disabled" mecha becomes inoperable. When a mecha has sustained damage equal to twice its Hits, it is demolished, and is beyond repair.

Mecha take half damage from acid, fire, and lightning attacks that aren't built as Mecha Weapons or if they have don't have a Defect that indicates their vulnerability. Cold attacks (such as falling through a glacier into freezing water) deal ¼ damage to mecha. Otherwise the Terrain section in the [Appendix C: Terrain](#) has expanded rules for various situations the mecha may find itself in.

Apply these multipliers after Armour Value.

## Fires

If a mecha loses 10 or more HITs due to fire or explosion, it will catch fire if it fails a fire save. The fire save TN is 12 + the damage inflicted. The mecha has no bonus to this save attempt — simply roll 3d6. Mecha that have the Volatile Defect automatically catch fire. If it catches fire, it suffers 5d6 damage each turn until extinguished; the mecha's Armour does not protect it. If a 10 is rolled when determining the amount of damage suffered, the fire grows in size: add another fire.

Anyone occupying a mecha that is on fire is considered exposed to the fire and must make a Reflex save to avoid taking 1d6 P/L damage: the TN is 18 if the mecha is Large, 18 if Very Large, 16 if Huge, or 12 if Gargantuan or Immense. If the mecha is medium-sized or a suit they are wearing, they cannot avoid the damage.

Characters may try to fight a fire instead of avoiding it. This is a TN 15 Reflex save. Success puts the fire out.

## Mecha Knockback

When a mecha gets hit, it may get knocked back from the sheer physical impact. If the total damage rolled for a successful attack (before subtracting any points for Force fields or Armour) is greater than the mecha's STR + A.V., the mecha is knocked back its Size DEF modifier in meters or knocked down in the same spot (GM's choice based on the circumstance). For every 10 points of damage beyond the mecha's STR + A.V., the character is knocked back double.

## System Failure Levels

Systems Failure comes in progressive levels of severity, from Superficial to Disabled. The description for each level of

severity and its effects are explained below.

### **Superficial Damage**

Any attack that causes up to its HLT in damage points (after subtracting any damage for AV) is a superficial damage. Superficial damage includes minor dents, scrapes and bumps.

Superficial damage does not restrict or reduce the mecha's movement, attributes or skills. Pilots are unaffected by Superficial damage.

### **Light Damage**

Any attack that causes up to 2x HLT in damage points (after subtracting any damage for AV) is light damage.

Not exactly superficial damage, but there is little if any chance that a mecha will be seriously affected.

All Mecha-based skill rolls are at -1 until the pilot is able to affect field repairs. This penalty may be ignored for one turn with a successful Tricky Mecha Combat skill roll (TN 12).

### **Serious Damage**

Any attack that causes up to 3x HLT in damage points (after subtracting any damage for AV) is serious damage.

Serious damage is just that. The mecha is damaged in such a way that seriously impedes its ability to do anything. If left in disrepair, serious damage can pose a serious risk of systems disruption. All Mecha-based attributes and skill rolls are at -2 until the pilot is able to affect field repairs. The mecha will lose 1 additional REF point each hour until stabilized by a mecha mechanic. Losing REF simulates systems disruption within

All Mecha-based skill and attribute rolls are at -2 until the damage is stabilized and then -1 with field repairs. These penalties may be ignored for one turn with a successful Challenging Pilot INT attribute roll (TN 18).

### **Critical Damage**

Any single attack causing up to 4x HLT in damage points (after subtracting any damage for armour) is critical damage that directly affects the pilot(s) of a mecha. Critical damage can include torn limbs, deep punctures, severe systems trauma, and so on.

All Mecha-based skill and attribute rolls are at -4 until the damage is stabilized and then -2 with field repairs.

Critical damage can be hazardous to the pilot as the attack would have shorted circuits and even could pass very close to the cockpit. The Pilot takes the Mecha's HLT in Blunt Damage. If the pilot is affected adversely by the damage then those penalties will flow through to the Mecha's control.

### **Critical Damage Effects**

When a mecha suffers critical damage hit, it sustains normal weapon damage, with no location multiplier. In addition, the mecha must roll on the Critically Hit Systems table below.

**Sensors:** The mecha loses the use of a sensor system like infrared or radar, or one of its senses, such as sight or hearing. The damaged system is determined randomly. The system remains inoperable until it is repaired. If all sensors are already destroyed, the mecha instead suffers double damage to HITS

**Gyroscope:** The mecha's gyroscope is damaged, throwing it off balance. The mecha suffers 2 points of damage to DEF, and the operator must make a Reflex check with a TN equal to 15 + HLT, or immediately fall prone. The result is cumulative each time this component is damaged.

**Motion Regulator:** The mecha's internal motion regulator is damaged, reducing its base movement in all forms by one-half. If this component is already damaged, the mecha becomes unable to move except with a 1m/Turn crawl as a full action.

**Cargo:** Part of the cargo is damaged; this could include any smaller mecha carried aboard. The GM determines the effect, usually applying the damage to an item carried. Note that if the mecha is carrying bulk cargo (such as a load of grain) a cargo hit will usually have no effect.

**Passenger Injury:** As for the pilot, above, but to a random passenger.

**Data Processor:** The mecha's internal data pathways are damaged. It suffers 2 points of INI attribute damage. Mecha with an Artificial Intelligence must make a WILL check with a TN equal to 15 + HLT, else it immediately loses all levels in one randomly determined skill for 24 hours.

**Articulation Servos:** The articulation servo in one of the mecha's arms or a vehicle's steering column is damaged. It suffers a -2 penalty to all attacks and pilot skill checks involving the use of the arm or in manoeuvring (vehicles). This result is cumulative each time this component is damaged.

**Energy Leak:** The mecha's energy source is breached. It suffers 2 points of Hazard Load Tolerance and the pilot must also make a HLT check with a TN equal to 15 + HLT, or be stunned for one turn.

**Weapon System:** One mounted weapon is hit and damaged, along with one round of ammo. Explosive ammo goes off, doing one-half normal damage to the mecha. If a mecha does not have any mounted weapons, the mecha instead suffers double HIT damage.

**Cracked Chassis:** The mecha's armour value is reduced by half. If this component is already damaged, the mecha instead suffers double damage.

**Special Module Actuator:** The mecha suffers damage to its actuators, which impairs the mecha's ability to use a special module such as gestalt merging or transformation or even booster. A mecha with a single damaged module actuator must make a HLT check as a full action with a TN of 15 + HLT in order to use the module. A mecha with two damaged actuators cannot use the module until its actuators are repaired.

**High-Yield Generator:** The mecha's generator housing (if installed) is damaged. The mecha is *slowed* until the housing is repaired. If this component is hit again, the generator explodes, dealing energy damage to the mecha and nearby characters. The explosion deals 1d6 points of damage per HIT Point of the mecha to all creatures in a radius of three meters (10ft) per HIT Point of the mecha. The mecha itself automatically takes the damage; other creatures in the radius may make a REF check (TN 12 + 1/2 HIT Points of the exploding mecha) for half damage.

## Critically Hit Systems

The various columns showing the number of dice to be rolled means the GM can nominate which column closest resembles the mecha's susceptible systems. The GM can rule that if a component rolled isn't actually present on the mecha, the character either 'lucked out' or the player must re-roll.

Roll (2d6)	Roll (3d6)	Roll (4d6)	Damage
2	3	4-5	Sensors
3	4	6-7	Gyroscope
4	5	8-9	Motion Regulator
5-6	6-7	10-11	Data Processor
7-8	8-9	12-13	Articulation Servos
9	10	14	Energy Leak
10	11	15-16	Cracked Chassis
11	12-14	17	Cargo
12	15-16	18-19	Passenger
	17-18	20-21	Weapon System
		22-23	Module Actuator
		24	High-Yield Generator

## Disabling Damage

Any damage from which a Mecha suffers more than 4x the mecha's HLT in damage points (after subtracting any damage for AV) is damage that directly affects the pilot(s) of a mecha while immediately shutting all systems down. The Mecha has been cored by a massive attack knocking the pilot senseless. The Pilot takes the Mecha's HLT in Lethal Damage. If the pilot is still conscious the mecha may be restarted at a skill roll TN of Challenging (18+). For every bonus Effect Number rolled, take off time for the restart.

## Damage Effects Summary

Damage	Effects Summary
Superficial	None.
Light	-1 to Mecha-based skills until mechanical aid received; -1 Mecha REF per day for 1d6 days unless stabilized.
Serious	-2 to Mecha-based skill and attribute rolls until stabilized. -1 REF per hour until repaired
Critical	-4 to Mecha-based skill rolls until stabilized, then -2 until repaired. A mecha system is disabled (roll on Critical table) and Pilot also takes Mecha's HLT in Blunt Damage.
Disabled	Instant Shutdown. Pilot also takes Mecha's HLT in Lethal Damage; otherwise, treat as Critical if successfully restarted TN 18
Destroyed	Negative HIT Point Damage. Total mecha destruction.

## Recording Damage

Damage that a mecha receives should be marked on the mecha record sheet in the boxes provided. Damage is marked as a slash ("/").

If a mecha has suffered a total amount of damage to bring his HIT to 0, any subsequent lethal damage should be recorded and lethal damage is marked as an "X." Once all the HIT boxes have been marked with an "X" then the Mecha is totally destroyed and beyond repair.

## Crew Injury

A key crew member aboard the mecha is directly in the path of any penetrating damage. He or she takes the same damage that the mecha sustained. This damage is halved on a Reflex save (TN 15). If the mecha has multiple key crew members, roll randomly to determine who was hit.

## Optional Cinematic Rule: Life Point Transference

If a mecha takes damage, its pilot may voluntarily choose to take some of the damage to his or her own Life Points instead of the mecha's. This is providing this does not reduce his or her Life Points below his or her Health score AND the resulting damage isn't at the Disabled level (75% damage in a single hit). If the resulting Mecha damage is at a Critical level, ignore the blunt trauma to the pilot.

*Example: A Mecha Pilot with Health 5 and 20 LIF Points owns a fighter jet with 40 HITs. Obviously, the pilot isn't tougher than 10 tons of steel — he's just luckier, and some of that luck can transfer over to his machine. In a dogfight, his fighter is hit by a radar-homing missile and takes 45 points of damage after Armour. Bad news! But the pilot isn't blown out of the air. Instead, he decides to take 15 points of damage to himself (reducing his LIF to 5 ... he can't drop them any lower than his HLT); the remaining 25 points of damage are applied to the mecha, which drops to 20 HITs and a Critical category damage. Damaged, but flyable.*

This rule is optional and may be suitable for Cinematic-style campaigns.

## Mecha Repair

There are three basic parts to repairing damage sustained by a mecha. Stabilization prevents the damage from becoming worse; Field Repair repairs the damage sustained; Refit replaces HITs to full.

For all Pilot Field Repair and Mecha Mechanic skill rolls, the following situational modifiers apply.

## Situational Modifiers

Condition	Modifier
Very dirty or unsafe conditions	-2
Makeshift repair bay (an alley between tall buildings)	-1
Improvised equipment and supplies	-1

Adequate tool and supplies (Mechanic's Shop)	+1
Ample tool and diagnostic supplies (Repair Bay)	+3

## Stabilizing

Stabilizing a mecha requires the pilot to take the machine out of the combat arena for an immediate system hot wire or reset to prevent worsening of the mecha's condition. This could involve re-routing power from a weapon system to the gyro or energy shields or allowing the computer to reset itself.

A successful Mecha Piloting roll will stabilize the damage, preventing the loss of any additional Mecha REF, for a period of time. The difficulty of the skill roll is based on the severity of the damage (see the *Stabilization Table*, below). At the end of this time a new skill roll is required. A failed roll means that the mecha suffers additional effects, as per the severity of the damage (see *Effects of Damage and Systems Failure*).

Stabilization allows a mecha to be moved to a repair facility, under its own power, for Field Repair or Refit.

### Stabilization Table

Damage	Difficulty	Roll required
Superficial	No roll required	No roll required
Light	Average (TN 5)	every day
Serious	Tricky (TN 15)	every hour
Critical	Challenging (TN 18)	every minute
Disabled	Impossible	No roll required

## Mecha Field Repair

Not every mecha can return to base for a full refit after every battle. Pilots are usually trained to be able to perform rudimentary repairs to a mecha. The pilot or mechanic will spot weld, cross-wire and repair some of the damage using the basic tools stowed on-board or from battle salvage.

Successful field repairs can remove up to one half the damage caused by battle. The time required to properly affect repairs on the mecha is shown on the Treatment Table below, based on the severity of the damage (note: this is "game time," not real time). At the end of the time period indicated, the mechanic or pilot makes a Mecha or Mechanic skill roll (GM's discretion), using the target number indicated. Success indicates the mecha has been completely stabilized and will not lose any more REF or HITs due to the damage. In addition, for every 2 points of the effect number for the skill roll (rounding up), the repair effort regains 10% of the lost HIT from the damage, up to a maximum of 50%.

### Field Repair Table

Damage	Difficulty	Time required
Superficial	No roll required	No roll required
Light	Average (TN 5)	1d6 minutes
Serious	Challenging (TN 18)	1d6 hours
Critical	Difficult (TN 21)	2d6 hours
Disabled	Impossible	No roll required

## Mecha Refit

A Refit is the only way of replacing damaged components and armour. Only with proper facilities and skilled mechanical engineers can a mecha be restored to its full glory with mecha REF and HITs back to original levels. Characters affect a full refit according to the severity of the damage shown on the table below.

### Mecha Refit Table

Damage	Difficulty	Time required
Superficial	No roll required	2d6 hours
Light	Average (TN 5)	1d6 days
Serious	Challenging (TN 18)	2d6 days
Critical	Difficult (TN 21)	2d6 days
Disabled	Difficult (TN 21)	4d6 days

## Disabled Mecha

When a mecha is reduced to 0 HITs or less, it is disabled. Although it might be repairable, it ceases functioning. The effects depend on the type of mecha, and its situation:

When disabled, weapons, special modules such as sensors (excluding Ejection Seats), and exotic modules such as Force Fields no longer function (or are frozen in the current configuration, for something like Transformation). If the mecha carries smaller craft (life pods, fighters, etc.) each still works on a roll of 1-4 on 1d6.

Mecha may explode if it has the Volatile Defect.

### Disabled on the Ground

A vehicle drops one speed category each action until it comes to a stop or hits something. The pilot cannot attempt any manoeuvres except a 60-Degree turn.

A giant robot or suit trips and falls over. It tumbles, losing two speed categories per action, and taking half-normal collision damage each action until it stops or hits something.

### Disabled in the Air

A disabled airborne mecha drops one speed and approximately 250m each action (unless diving enough to force an increase in speed, in which case there is no change) until it is stationary or stalls, then it falls from the sky. The pilot

cannot climb, nor attempt any manoeuvres except a 60-Degree turn or a dive. See the Action! System Falling Table for damage sustained while falling.

### Disabled in the Water

Mecha moving on the water drops one speed category each action until it comes to a stop. The pilot cannot attempt any manoeuvres except a 60-Degree turn.

The mecha will also take on water and start to sink. The mecha takes 1d6 points of flooding each action. When the flooding reaches (2 × total HITs — the positive value of the current HITs) the mecha will sink, or if a submarine that is underwater, will be unable to surface, and continue to sink.

Example: Mecha that had 120 HITs is reduced to -17 HITs. It is disabled and sinking. Each turn, it takes 1d6 points of flooding. When the flooding reaches (120-17) 103 points, the mecha will sink.

A sinking mecha drops at a rate of at least 6m per turn until it hits bottom, or breaks up due to pressure. Occupants will start to drown, unless they escape and make it to the surface, or can survive underwater. Occupants inside a large vessel may take several actions to escape. If the vessel has sunk deep enough, they may be unable to escape due to water pressure without special gear. This is up to the GM.

If a Gargantuan or Immense-sized vessel sinks, it may suck people on deck or nearby swimmers down with it. This affects a radius equal to the mecha's longest dimension. Anyone in that radius must make a TN 15 Swimming check, to which he or she may add their Strength bonus; failure means that they go down with the ship.

### Disabled in Space

Mecha that is disabled in space will continue drifting in the same direction at whatever speeds it had before it was disabled. If it is disabled in a low orbit, its orbit may decay in minutes or hours.

This assumes "realistic" physics. If the mecha was using some type of dramatic drive or faster-than-light drive that defies normal laws of motion, it may come to a dead stop, slowly decelerate (as if an aircraft), drop out of hyperspace, or whatever; it all depends on how the drive works in the GM's campaign.

## Destroying Mecha

Mecha don't "die" when they reach -10 HITs. Instead, a mecha is destroyed when it loses HITs equal to twice its full normal total. A destroyed mecha cannot be repaired.

## Mecha Combat Manoeuvring

While Robot and Animal mecha combat is very similar to large scaled human combat, there are also various terrains and conditions which allow for rules to describe these conditions. The game master is not locked into any of these manoeuvres and can alter Target Numbers or plain disallow ones that don't fit into the campaign.

### Controlling a Vehicle

First and foremost, a vehicle requires at least one character to directly (or remotely) operate it, using the Drive/Pilot skill.

As described on in the Transportation Group [on page 18](#), there are actually a number of categorical Drive/Pilot skills, each used to control a family of closely-related vehicles.

Under the routine circumstances of vehicle operation, no skill roll is ever necessary. However, non-routine circumstances of vehicle operation are rather common in heroic adventures.

As a general rule of thumb, an attempt to control a vehicle for any reason counts as a standard action, so a character may make up to two Drive/Pilot checks per turn, if necessary.

### Tactical and non-Tactical Movement

All speeds and distances in *MechASsemble* that are not given in terms Movement (meters per turn) will be noted in kilometres (kph) and miles (mph) per hour.

When a character wishes to use a vehicle to travel somewhere, without engaging in combat or crazy stunts, it is referred to as **non-combat movement**. Most character movement rates, on the other hand, are given in combat terms ("3 m/turn"). The movement table shows the movement rate in meters (yards) per turn for a vehicle travelling at any given speed from 5 mph to 200 kph. By using this table, you can find out where to place vehicles each turn they're involved in tactical combat with characters (although, at higher speeds, they're likely to blow through in seconds and be far beyond the range of most character-on-character melees, unless the driver or pilot of the vehicle in question is determined to stay involved).

Fitting vehicle movement into the initiative system is relatively simple. A vehicle moves one-half of its full distance (based on MOV) at the beginning of its driver's turn, and the remaining one-half of the distance at the very end of the turn.

When moving tactically at MOV 40 or above, a vehicle must move at least twice its own length before it can turn up to 60 degrees (one hex side) in any direction. At speeds below 40 meters per turn, it must move only one length before making such a turn.

### Cautious Speed

The first speed band listed for each vehicle is its maximum safe speed. While moving at a cautious speed, the driver or pilot of a vehicle incurs no penalties to his Drive/Pilot skill rolls.

### High Speed (×2 MOV)

Equivalent to a character running, at high speed the driver or pilot of a vehicle incurs a **-1 penalty** to his Drive/Pilot skill rolls.



## Full Speed (×3 MOV)

Equivalent to a character sprinting, at full speed, the driver or pilot of a vehicle incurs a -3 penalty to his Drive/Pilot skill rolls.

## Abridged Movement Table

MOV	Kph	Mph	Example (based on max speeds)
1	1.2	0.7	
5	6.0	3.5	M113 APC (water speed)
40	48.0	28.2	Fastest recorded human running
50	60	35.3	Aircraft carrier, Queen Mary
55	66	38.8	Destroyer, Ocean liner, M113 APC
65	78	45.9	M1A1 Abrams (tank), M-2 Bradley AFV
75	90	52.9	T-72 tank
85	102	60.0	Highway driving speed
100	120	70.6	Max hwy. speed limit (U.S.)
120	144	84.7	Economy car (max speed)
125	150	88.2	Passenger train
130	156	91.8	MLB fast-ball pitch
180	216	127	Police patrol car (max speed)
200	240	141	Single-engine private plane
220	264	155	Single-engine private plane (cruising speed)
230	276	162	AH64 Apache
240	288	169	F6F Hellcat cruise (max 380 mph)
250	300	177	CH-47 Chinook
280	336	198	Nascar Racing Car
700	840	494	C-17 cargo jet, 757 (528 mph)
800	960	565	B-52
1000	1,200	706	Sound barrier (approx. 742 mph)
1200	1,440	847	Land speed record
1800	2,160	1,270	F18 Hornet (1,318 max)
2400	2,880	1,694	F-15 Eagle (max)

## Vehicle Combat Modifiers

Problem Attack	TN Modifier
Target is moving at high speed	-1
Target is moving at full speed	-2
Attacker is moving at high speed	-1
Attacker is moving at full speed	-2
Target has a height advantage on attacker	-2
Attacker has a height advantage on target	+2
Character firing own weapon from vehicle moving at high speed	-4
Character firing own weapon from vehicle moving at full speed	-8
Attacker's vehicle is engaged in defensive driving/piloting	-2
Attacker's vehicle is engaged in evasive maneuvers	-4

## Making Attacks on and From Vehicles

Making an attack on a vehicle using a weapon held and wielded by a character is the matter of a normal attack roll.

Unless otherwise noted, making an attack with a vehicle-mounted weapon is a standard action. The driver or pilot of a vehicle may not make any special manoeuvres while attacking from the vehicle. Passengers or crew members with weapons systems may make their attacks with any speed penalties, if their weapons allow it. A character firing a



character-sized weapon from a moving vehicle suffers penalties equivalent to the TN Modifier table on [page 88](#)

## Applying Damage to Vehicles

Each time a vehicle loses factors of HLT in HITs, the vehicle suffers damage to its **systems**. Some system damage is purely cosmetic, while other forms of system damage are crippling. Most systems may be damaged multiple times, bestowing cumulative effects upon the critically damaged vehicle.

A vehicle that is reduced to 0 HITs is considered **disabled**. All of its systems cease to function. It can no longer be controlled, and it comes to a stop at the end of the turn. Whether or not there are any further complications (does the vehicle plunge over a bridge and burst into flames, or just roll to a gentle stop?) is left to the GM's judgement, based on the situation.

### Damage Effects Summary

Damage	Effects Summary
Superficial (HLT)	None.
Light (2×HLT)	-1 to Vehicle-based skills until mechanical aid received; -1 Manoeuvre per day for 1d6 days unless stabilized.
Serious (3×HLT)	-2 to Vehicle-based skill and attribute rolls until stabilized. -1 Manoeuvre per hour until repaired
Critical (4×HLT)	-4 to Vehicle-based skill rolls until stabilized, then -2 until repaired. A vehicle system is disabled (roll on Systems Damage table) and Pilot also takes Vehicle's HLT in Blunt Damage.
Disabled (0 HITs)	Instant Shut-down. Pilot also takes vehicle's HLT in Lethal Damage; otherwise, treat as Critical if successfully restarted TN 18
Destroyed	Negative HIT Point Damage. Total vehicle destruction.

### Random (2d6) Systems Damage

2	Tires (or Wing Damage for Aircraft): Vehicle suffers -1 Manoeuvre
3	Passenger(s): Passenger(s) suffer 1d6 B/S damage
4	Steering: Vehicle suffers -1 Manoeuvre
5	Fuel System: Vehicle loses 5% of its total fuel capacity per turn.
6	Door Loss: One of vehicle's doors is torn off.
7	Engine: All MOV is cut to 50%
8	Headlights (Aircraft Instrument Landing System): Both headlights are blown out.
9	Transmission (Wing Aileron): Vehicle loses -2 manoeuvre, cannot travel above 20% of safe speed
10	Wind shield: Front wind shield totally blown out
11	Exhaust: The vehicle is incredibly loud even while idling.
12	Critical damage— vehicle becomes inert and useless.

## Ground Vehicles

Ground vehicles are more common than any other type, and they have peculiar braking characteristics that might cause complications in a tight situation. These modifiers are accumulative depending on the circumstances.

Random	Problem	TN Modifier
2	Light Precipitation	+1
3	Heavy Precipitation	+3
4	Icy Road	+3
5	Heavy Winds	+2
6	Extreme Winds	+4
7	Freezing Rain	+5
8	Dirt/Gravel Road	+1
9	Ill-Maintained Asphalt	+1
10	Extreme Potholes	+2
11	Extreme Turn/Curve	+2
12	Washout or Deep Stream	+5

Looking for a random incident to spice up a scene involving ground vehicles? Roll 2d6 on the table above and factor the new element (if applicable) into the situation, as well as Driving skill rolls, in the next turn.

## Braking in a Ground Vehicle

The faster a ground vehicle is travelling, the more distance it needs to bring itself to a safe stop. This distance is *highly* abstracted for ease of use in the Action! System. Under routine circumstances, hitting the brakes requires no skill roll— the vehicle simply comes to a stop after decelerating by one speed category per turn. So coming to a dead stop from Full speed (or Sprint) takes 3 turns. An emergency stop is a bit chancier, and is referred to as **stopping on a dime**. When a character tries to stop on a dime, he is trying to halt the vehicle in as few feet as possible, and he risks an accident if he fails. To stop on a dime, the character must succeed in a Drive check against a TN equal to 12 + [1 for every full 10 MOV the car is travelling over 40 meters per turn (48kph/28.2mph)

Failure means one of two things.

Roll 1d6:

1-3: Character didn't hit the brakes in time. Vehicle travels the full distance for a routine stop, possibly hitting anything in its way.

4-6: Character has caused a **spin-out**. See below.

## Spinning Out in a Ground Vehicle

A spin-out is a potential accident involving one vehicle, rather than a collision between two vehicles. Spin-outs are caused when the driver of a vehicle attempts to stop on a dime but fails, and may be caused by other situations.

The driver of a vehicle entering a spin-out must attempt a Drive check against a base TN of 15, modified by any unusual conditions in the environment. Success means that the character may bring the vehicle to a safe stop with another full turn of concentration, during which he may take no other action. Failure means that the GM must roll 1d6 and consult the following chart:

1. Vehicle suffers automatic tire damage.
2. Vehicle suffers the light damage in a minor collision with a small obstacle.
3. Vehicle spins several times and suffers serious damage after hitting a large obstacle.
4. Vehicle flips over and comes to rest on the roof of its passenger compartment, if it has one, or suffers serious damage if it doesn't.
5. Vehicle spins spectacularly and suffers critical damage after hitting a massive obstacle.
6. Vehicle is completely totalled Passengers suffer 2d6 P/S damage regardless of whether or not they're strapped in.

## Ground Vehicle Collisions

If a vehicle collides with something, it takes damage based on its current speed. If a vehicle collides with a moving object, such as another vehicle or an animal alt form, the GM must determine the net speed of the impact based on velocity and angle of impact.

## Collision Damage

Collision damage begins with speed. When colliding with a stationary object, both objects suffer the vehicle's MOV damage, where MOV is the vehicle's current speed in metres per turn. Note that aircraft travel at much higher speeds and therefore suffer much more damage. When an aircraft collides with a stationary object, both objects suffer MOV×3 damage. Thus, collisions involving aircraft and spacecraft can be catastrophic. Damage to each object is calculated separately, multiplied by the size category of the other object in the collision.

Note that another option is to consult the Falling and Velocity Table [on page 108](#) and roll the equivalent dice for damage.

### Size of other Object    Damage Multiplier

Tiny	x1/4
Very Small	x1/2
Small	x1
Medium	x2
Large	x3
Very Large	x4
Huge	x5
Gargantuan	x6
Immense	x7

Collision with a moving object also depends on the angle of impact.

- If two vehicles were moving directly toward each other when they crashed, add their speeds together for the purposes of determining collision damage.
- If two vehicles are moving in the same direction and one rammed the other, subtract the lower from the higher speed. Use the difference to determine collision damage.
- If the target vehicle was moving perpendicular to the other, ignore the target vehicle's speed when determining collision damage.

## Passengers in Ground Collisions

Passengers that are securely strapped into a ground vehicle must make a Health Attribute Save against a TN equal to the number of Collision Dice the vehicle deals (or suffers, whichever is higher). If they succeed, they will suffer 1d6 B/S

damage. If they fail, they will suffer 3d6 B/S damage. Passengers that are not securely strapped into a ground vehicle suffer 1d6 B/S damage for every Collision Die rolled by the vehicle in which they are travelling (or the vehicle that hits it, whichever is higher).

Any passenger in a ground vehicle that suffers serious damage endures an additional 1d6 P/S damage.

Any passenger in a ground vehicle that suffers critical damage endures an additional 2d6 P/S damage.

## Air Vehicles

Aircraft have a few special rules and situational modifiers.

### Random Problem Effect on Check TN

- |    |  |
|----|--|
| 2  | Light Precipitation +1                                 |
| 3  | Heavy Precipitation +2                                 |
| 4  | Heavy Winds +3   |
| 5  | Extreme Winds +5                                       |
| 6  | Freezing Rain +5                                       |
| 7  | Icy Runway +3 Take-off/landing (Iced Wings)            |
| 8  | Light Fog +2   |
| 9  | Heavy Fog/Smoke +4                                     |
| 10 | Dust Storm +5  |
| 11 | Electrical Storm +2                                    |
| 12 | Bird/Debris Strike (roll damage for a critical system) |

Looking for a random incident to spice up a scene involving air vehicles? Roll 1d10 on Table 44 and factor the new element (if applicable) into the situation, as well as Pilot checks, in the next turn.

### Aircraft and Damage

Aircraft has a special damage rule reflecting the fact that their systems are a bit more delicate than those of ground or water vehicles. Surface damage that would be superficial to an automobile may prove fatal to an aeroplane by altering its aerodynamic characteristics. Aircraft use the damage effects of one level higher than actual damage sustained. So if a fighter was dealt "Serious" damage, the vehicle is affected as if it were "Critical."

### Air-to-Air Collisions

Collisions between aircraft are very serious, for all the reasons given above. When an automobile hits another vehicle, it may slide or roll to a safe stop and cease moving. When an aircraft hits another, the only direction its remains can go is straight down, hundreds or thousands of feet.

When an aircraft is damaged in a collision, it immediately rolls against critical system damage

### Passengers in Air-to-Air Collisions

Passengers that are securely strapped into an aircraft must make a Health Attribute Save against a TN equal to the number of Collision Dice the aircraft deals (or suffers, whichever is higher). If they succeed, they will suffer 1d6 P/S damage. If they fail, they will suffer 2d6 P/S damage.

Passengers that are not securely strapped into an aircraft suffer 1d6 B/S damage for every Collision Die rolled by the vehicle in which they are travelling (or the vehicle that hits it, whichever is higher).

Any passenger in an aircraft that suffers serious damage endures an additional 2d6 P/S damage.

Any passenger in an aircraft that suffers critical damage endures an additional 4d6 P/S damage.

If an aircraft is disabled or starts to fall from the sky, 2d6 turns remain until the aircraft totally disintegrates. Anyone wishing to take emergency action (preferably involving parachutes) should do so immediately. Any character still trapped within the aircraft when it disintegrates will either (roll 1d6)

1-3 begin uncontrolled solo free-fall

4-6 begin uncontrolled free-fall while trapped within a large, heavy chunk of debris.

GM's should not forget that passengers in aircraft disabled or rendered useless at very high altitudes may also face the dangers of low pressure and low temperature as they plummet back to the ground.

### Air-to-Surface Collisions

Aircraft deal Collision Dice one size bigger than their usual scale when crashing into surface targets. A pilot may deliberately plunge an aircraft into a surface vehicle with a successful Pilot skill roll, but these actions will automatically destroy the aircraft regardless of how much damage it or its target takes in the collision. Any passengers in the aircraft suffer 3d6 points of P/L damage.

## Water Vehicles

For the most part, water vehicles may be treated as ground vehicles, in that they move on a two-dimensional surface (though submarines do add a third dimension to water movement and operate like lumbering aircraft).

Looking for a random incident to spice up a scene involving water vehicles?

Roll 2d6 on this table and factor the new element (if applicable) into the situation, as well as Pilot skill rolls, in the next

turn.

Problem (2d6)	Effect on Check TN
2	Light Precipitation +1
3	Heavy Precipitation +2
4	Heavy Winds +1*
5	Extreme Winds +2*
6	Freezing Temperatures +2
7	Light Fog +2
8	Heavy Fog/Smoke +4
9	Serious Wave Action +2**
10	Severe Wave Action +4**
11	Hurricane Weather +6**
12	Water Spout +8**

\*Double if vessel is sail-powered

\*\* Decrease by 1 for Colossal water vehicles.

### Taking Water After Damage

One unique danger faced by water vehicles is the fact that they can take on water if hull integrity is breached. As a vehicle is swamped with water, it will slow down and begin to sink.

There is a non-cumulative chance per Damage level that a damaged water-borne vessel will take on water. The table below lists these unmodified target numbers, as well as the increment of time that will pass between each level of flooding if a vehicle does begin taking on water:

Vehicle Damage	Flooding TN	Spd
Superficial (HLT)	None.	
Light (2×HLT)	8	1 hr
Serious (3×HLT)	12	5 min
Critical (4×HLT)	15	1 min
Disabled (0 HITs)	18	2d6 turns
Destroyed	24	1d6 turns

If a vehicle does begin taking on water, it reaches the “flood level” of *damp* after the listed increment of time passes. Flood level increases steadily, according to the chart below, as each subsequent time increment passes.

Flood Level	Effect
Damp	-1 Manoeuvre, max speed is high
Leaking	-2 Manoeuvre, max speed is normal
Flooded	-3 Manoeuvre, max speed is cautious
Waterlogged	-4 Manoeuvre, max speed is cautious

### Going Down Glub, glub, glub.

Thus, while a heavily-damaged vessel can take on a great deal of water and sink rapidly, a lightly-damaged vessel can also take on water and sink more gradually if nobody does anything about the leak.

One or more characters aboard a damaged vessel may attempt Repair skill rolls (number and TN set by the GM) to repair leaks. Leak repair typically doesn't restore lost HITs to a damaged vessel, but it will prevent further water intake.

Once a leak is taken care of, relatively simple though tedious baling efforts (or work with a mechanical pump) should clear a water-borne vessel of excess water.

### Dangerous Wave Action

The surface of a body of water can become quite agitated. Waves, if approached improperly, can batter or even swamp a vessel. For game purposes, there are three levels of dangerous wave action. “Serious” waves are 10 or more feet in height, “severe” waves are 20 or more feet in height, and “hurricane” level waves are 30 feet or more, sometimes looming as large as eight- or nine-story buildings.

The table below describes dangerous wave action. The pilot of a vessel facing such action should make a Pilot roll (TN based on the severity of the waves) as each appropriate increment of time passes. Success means that the pilot has skilfully avoided the ill effects of the agitated water. Failure means that his vessel takes the listed amount of damage from the battering of the waves:

Wave Level	TN	Damage	Spd
Serious	12-15	2d6	1 hour
Severe	18-21	4d6	10 minutes
Hurricane	24-27	6d6	1 minute

Special Exception: Submarines, built to be watertight for their entire hull length, may simply batten down their hatches and slip beneath the waves to escape dangerous wave action.

Even if forced to operate on the surface in a time of inclement weather, a submarine grants its pilot a +4 circumstance bonus to pilot checks made to avoid dangerous wave effects.

## Special Vehicle Manoeuvres

For situations not already covered:

### Area Strafing

Any aircraft with a high-rate-of-fire weapon may attempt the area strafing manoeuvre. This is a full-turn attack action (consuming 10d6 bullets or shells), and may be used on an area no larger than 6 meters (20 feet) wide and 12 meters (40 feet) long, with the long axis of the attack lying along the aircraft's flight path. The pilot or gunner of the aircraft must then make an attack roll with a -6 penalty. Any character within the zone must make a Reflex Attribute Save, TN equal to the attack roll total, or suffer one hit from the aircraft's weapon. Any character within the zone must also make a Willpower Save against suppressive fire, TN 15 if they wish to attempt stand their ground. Only aircraft may area-strafe.

### Combat Reverse

A combat reverse is a ticklish manoeuvre used to take a ground vehicle moving backwards at high speed and skew flip it around in a minimum amount of time and space. This manoeuvre is drilled into embassy drivers and bodyguards and used to pull VIPs out of vehicular ambushes. Anyone attempting a combat reverse must make a Drive skill roll, TN18 (plus vehicle's size modifier, plus situational modifiers). Success means that the vehicle takes 1d6 irresistible points of stress damage, but the driver has effectively turned the car around one hundred and eighty degrees within twice its own length.

Failure means that the driver must roll 1d6 on the spin-out chart. Only ground vehicles may combat-reverse.

### Defensive Driving/Piloting and Evasive Manoeuvres

As a standard action, a character controlling a vehicle may declare that he is driving or piloting defensively. This grants his vehicle a +2 bonus to DEF until his next action. Any attack action taken by the driver that turn suffers a -4 penalty, and any attack made by anyone else in the vehicle that turn suffers a -2 penalty. For a more desperate and elaborate style of defensive manoeuvring, see evasive manoeuvres below. Any vehicle may attempt defensive driving/piloting.

Evasive manoeuvres are even more extensive than defensive driving or piloting. They grant a vehicle a +4 circumstance bonus to DEF until the driver's next action, though the driver can take no other actions and anyone firing a weapon within or upon the vehicle suffers a -4 penalty to his attack roll. Any vehicle may be used for evasive manoeuvres.

### Deliberate Ramming

Ramming is a manoeuvre used to smash one vehicle with another at speed, hopefully with more precision and less damage to the attacker than an uncontrolled collision would inflict. Ramming is a full-turn attack action, and the ramming vehicle must be moving at high speed or better. The driver of the ramming vehicle must make a Drive/Pilot check against his target's DEF, with a -2 TN penalty due to the precision required. If successful, he may make an immediate second Drive skill roll, TN equal to the number of Collision Dice he's just inflicted. If this second check is successful, his vehicle takes half-damage from all Collision Dice. Any vehicle may be used to attempt a ramming run.

### Dive-Bomb

A dive-bomb manoeuvre is used to fling an air-dropped munition at a fairly large or slow-moving target with a heightened degree of accuracy. A dive-bombing run requires a minimum starting altitude of 300 meters (1,000 feet) and requires four full turns to pull off. On the pilot's action in the second turn, he may make a single attack against a ground target with a +2 circumstance bonus to his attack roll. For the first two turns of his dive, as well as the two immediately thereafter, his aircraft will suffer a -2 circumstance penalty to DEF due to his inability to manoeuvre freely. Only air vehicles may dive-bomb.

### Running Characters Over

If the operator of a ground vehicle attempts to run a character (on foot) over, the vehicle operator must make a Drive skill roll against the target's DEF to hit. If struck, the target takes the appropriate number of Collision Dice for damage.

He may make a HLT Save or a REF Save (whichever is more favourable) for half damage.

Only ground or water vehicles may be used in this fashion. A character run over by a water vehicle gains a +4 circumstance bonus to his save for half damage.

### Side-swipe

A driver making a side-swipe is attempting to strike a glancing blow off the front of a target ground vehicle (or scare the target into veering sharply away) with the side of his own ground vehicle. The driver of the attacking vehicle must engage in an opposed Drive check against the driver of his target vehicle, with the attacker suffering a -2 attack penalty due to the precision required for this manoeuvre. If the attacker beats the driver of the target vehicle, that driver must immediately make a Drive check against spinning-out. If the attacker fails in his side-swipe attempt, he himself must make a Drive check against spinning-out. Only ground vehicles may attempt side-swipes.

## ***Aero-Space Manoeuvres***

The following section expands on the Vehicle Combat rules to include the unique three-dimensional nature of Air, Space and even Underwater Combat.

An aircraft can perform a wide variety of aerobatic manoeuvres, many of which involve radical changes in altitude, speed, and direction. As a general rule, medium and heavy bombers, airliners, and cargo aircraft may not perform some of these manoeuvres unless the GM allows it and then, only at a severe penalty. The previous mecha chase rules can also be used for extra flavour to the air combat rules when performing these manoeuvres.

### **Barrel Roll (TN 24)**

To perform a Barrel Roll, an aircraft pulls up and over, rotating around its forward flight path as if the plane were flying a 'tubular' spiral path. The affect of this stunt in game terms is a sharp loss of forward movement without changing your speed. If the Barrel Roll is successfully performed, the plane's forward movement is halved. The vehicle executes a 360 degree lateral roll, ending in the same upright orientation as it started. Any mecha grappling the vehicle must make a grappling check, with a penalty equal to the Pilot check's effect number made to complete the roll; in order to stay on the vehicle.

### **Climbing and Diving (TN 12)**

A flier that dives into the ground will crash. A flier lacking life support cannot climb beyond the altitude where its crew can breathe, or so high that its engines (if they are air breathing) run out of oxygen. Mecha that is flying can use some or all of its movement to increase or decrease altitude as follows:

#### ***Mecha has no stall speed***

The mecha can use all of its movement to climb or dive, but while climbing; each meter of distance travelled counts is half current MOV.

#### ***Mecha has stall speed***

The mecha can use any of its movement to dive, but can spend no more than 1/2 of its movement climbing, and each MOV of distance counts as two MOV per turn. It must move horizontally a distance equal to its turn distance between a climb and a dive.

For example, if a mecha moving 200 meters per Turn (at very high speed) could dive 50m, move horizontally 50m (its turn distance at High speed), and then use the remaining 100m of movement to climb 50m.

Keep track of altitude with a note of the mecha's altitude in meters. In practice, it is usually easiest if most mecha stay at the same altitude unless necessary.

If a mecha spends at least half its movement diving, and does not climb, on its next turn its top speed is increased by up to double normal or by 300m, whichever is less. The mecha may not decrease its speed category, and may increase its speed by up to two categories (if its new top speed allows this). If a mecha spends at least half its movement climbing, and does not dive, on its next turn its pilot may not increase its speed category.

#### ***Underwater***

Mecha that is moving underwater is treated as a mecha with no stall speed, but otherwise uses the same rules as a flier, and keeps track of depth the same way. The speed increase while diving, however, is limited to double speed or +150m, whichever is less. It cannot climb above the surface, or safely dive below its rated dive depth.

#### ***Rapid Climb/Dive***

The vehicle climbs or dives at an angle up to 90 degrees. The pilot may choose how much of the vehicle's speed to expend gaining or losing altitude or depth, but it must be more than half. Requires a Pilot check with a base TN of 15, +3 for every turn in the dive/clime. The vehicle must remain level for at least one square between climbing and diving.

#### ***Pulling Out of a Steep Dive***

To avoid blacking out, a Challenging TGH Attribute roll (TN18) is required.

### **Extend (TN 12)**

This is a defensive move made by an aircraft with a higher Top Speed than its pursuer, made in an attempt to escape a dogfight.

### **Hammerhead (TN 27)**

This is a very challenging stunt where the aircraft is pulled straight up into a vertical climb until its speed drops to zero. If successfully performed, the pilot maintains control of the machine, flips it down into a vertical dive, and then pulls out of the dive in any direction he or she wishes.

### **Hard Turn (TN 12)**

The aircraft performs a steeply banked turn as described above for ground vehicles, moving only half the Turn Number before making a hex facing heading change. In addition, the player must make a Challenging TGH Attribute roll (TN 18) to avoid blacking out.

### **Immelman Turn (TN 21)**

This difficult manoeuvre is a half-loop and a half-roll. The vehicle climbs, inverts, then executes a half-roll to return in an upright orientation and reverse its direction of travel. The vehicle ends its move in the same hex in which it started, facing the opposite direction. This is the only way for an aircraft or submersible without VTOL to make a 180 degree turn; otherwise, it must make consecutive soft or hard turns to reverse its direction. Executing an Immelman turn requires a TN 21 Pilot skill roll. Any mecha grappling the vehicle must make a grappling roll with a penalty equivalent to the effect number of the Pilot skill roll made to complete the Immelman turn; in order to stay on the vehicle.

---

## Landing (TN 12)

The aircraft slows to just above Stall Speed and dives to just above ground level, lowers its gear, and rolls out along a runway. The GM increases the difficulty of the Landing roll for conditions of the landing surface and other affects of her choice. Vehicles with VTOL capability do not need to make Pilot checks to land. Additionally, mecha may land as part of transforming.

### Carrier Landing – TN 18

Putting an aircraft down on the pitching deck of an aircraft carrier at sea is not a job for the timid; nor is a manual landing on a space carrier with various pitch and yaw and synchronization issues. Vehicles with VTOL capability get a +3 still bonus to land.

---

## Loop (TN 18)

The vehicle executes a full loop over the course of the round, gaining and losing altitude or depth and ending up in the same position as it started. Executing a loop requires a TN 18 Pilot check. Any mecha grappling the vehicle must make a grapple check to stay on the vehicle. The penalty to the grapple roll is equal to the effect number of the Pilot check made to complete the loop.

---

## Pursuit (or Lag) Roll (TN 24)

This is an aggressive manoeuvre designed to put a pursuing aircraft on the tail of its manoeuvre target. If the target plane turns, the pursuing plane barrel rolls in the opposite direction and then pulls back into tail of the target. The Pursuit Roll would be used if players were pointed away from the tail of your target and is difficult to perform. If done correctly, the aircraft slides right in on the opponent's tail.

---

## Side-slip (TN 18)

The aircraft will tilt up on one wing (left or right) and the pilot allows the plane to slide down sideways along its flight path without turning. The game effect is a one hex move to the side for every 30m (100 feet) of altitude lost.

---

## Scissors (TN 24)

This is an extreme contest of pilot skill as two dog fighting aircraft weave back and forth across each other's path in an attempt to get behind the other. The two planes go slower and slower until they are close to stall speed. The more skilful pilot will end up on the tail of the other craft. A failed roll can mean a spin and/or becoming the target of the other aircraft.

---

## Split-S (TN 21)

This is a popular escape manoeuvre used to get away from an enemy closing on your tail. The plane is rolled over on its back and the pilot pulls the stick back so that the aircraft goes into a steep dive. When the plane pulls out of the dive, it can face in any direction, but usually faces back the way it came, i.e. reversing its course for a substantial loss of altitude. Takes two actions with the first being defensive (+3 DEF).

---

## Stalling (TN 15)

A flying mecha will stall if, at the end of a turn, it has not moved faster than its stall speed (see Stall Speed Defect). Some mecha have no stall speeds; they will never stall.

If a flying mecha starts its turn in a stall, the pilot must make an immediate TN 15 check to avoid losing control (see Losing Control). Even if the pilot avoids losing control, the mecha cannot perform any manoeuvres or stunts other than to Dive, although he or she may alter the mecha's speed. It pulls out of its stall if the aircraft can end the turn having moved faster than its stall speed. If not, next turn the effects are the same — a check to avoid losing control, and the same limitations.

---

## Wing over (TN 18)

The aircraft tilts up on one wing (right or left) and turns sharply in that direction and downward. Also called a 'Slice', this manoeuvre trades altitude for speed and direction. The aircraft does not lose speed performing the stunt because gravity adds speed; however the aircraft does rapidly lose altitude, at least 100 feet for every hex facing (60°) of turn.

---

## Yo-yo (TN 15)

This is a 'roller-coaster' manoeuvre that allows a pursuing aircraft to stay behind and/or catch up with a tailed target. A 'High' Yo-yo is a rapid pull-up and then dive to keep a pursuing plane with higher speed from overrunning its target. A 'Low' Yo-yo is a dive and rapid pull-up using gravity to help a slower aircraft catch up with a speedy target. If a High Yo-yo fails, the pursuer overruns the target and shoots out in front. If a Low Yo-yo fails, the target gets clean away.

---

## Mechamorphosis Manoeuvres

Taking the skill in Mechamorphosis means the operator of a variable mecha can perform exceptional manoeuvres that normally trained operators could not normally do. Game masters may allow the expenditure of an action point for characters only skilled in piloting the mecha. The following manoeuvres are dependent on a mecha having some secondary configuration that normally takes an entire Turn to perform. Note: **Vehicle** = the transport mode, **Combat** = the alternate configuration.

---

## Modular Leap Attack (TN 21)

This move combines a vehicle mid air ram with a punch or kick and then a quick transform back to the vehicle mode. The result is an attack combining the damage gained from ramming and a leap attack. The vehicle is aimed at a target and then brought up to ramming speed. Through the use of either booster jets or ramp style inclines, the vehicle takes to the air at speed and transforms into the combat mode. The combat mode then makes the attack onto the target using



leap kicks or punches before again quick modulating back to vehicle mode in order to speed off. Ram damage is added to the strike damage.

### **Mid Air Vehicle Transform (TN 12)**

Depending on the distance from the ground/water, the momentary pilot disorientation while changing modes can be fatal. Changing from the combat to vehicle mode also changes the aerodynamics of the modular vehicle and the pilot must control the effects of this change else the vehicle's nose may impact with the ground before completion.

### **Modulating Tackle (TN 18)**

By approaching a target in transport mode using the additional speed inherent in that configuration, the pilot can opt to alter modes and tackle the target in combat configuration. The damage is still the standard ramming damage shown in the vehicle combat section, however the combat mode may also make a disarm, punch, tackle, kick or grab while slamming into the target. Note that if the transformation time is more than one action then the target gains initiative and can act before the character makes the tackle.

### **Non-Standard Environment Transform (TN 15)**

Surface vehicles modulating into the combat mode and vice versa while either submerged, falling from the air or in orbit can be hazardous without proper training. The same can apply for air vehicles at rest on the ground or beached aquatic vehicles. Failing the Target Number means that the transformation takes twice as long and the pilot loses any initiative during those turns. This applies to any transforming vehicle in an environment it was not designed for.

### **Quick Transform (TN 15)**

All transforming vehicles could transform just that little bit faster however built in safety controls prevents the possibility of catastrophic stresses, failures or misalignments that could occur at faster speeds. Successful TN roll allows a pilot an emergency transformation, turning Mechamorphosis into a movement action equivalent to a "Run" rather than a full action. Failing the roll inflicts superficial damage (TN 25% of HITs).

### **Recovery Transform (TN 18)**

In the event of a vehicle tipping over, losing control, in an uncontrolled dive or similar occurrences, the pilot quickly needs to recover to prevent serious damage. The pilot may wish to use the option of modulating into the alternate mode where legs, arms or different propulsion method could stabilize the craft quickly compared to the vehicle mode option. Since the pilot loses initiative while regaining control the Recovery Transform is an option that could provide for a better response to any attack or situation once recovered.

### **Running Transform (TN 15)**

When a humanoid or creature styled combat configuration wishes to make a running transformation into its vehicle configuration a Target Number is assigned depending on the circumstances. Failing this roll results in losing control and initiative. Note that a standing or running transform into an aircraft mode increases the Target Number

## ***Chase Manoeuvres***

Role-playing games regularly involve action and chases are a common occurrence. The following rules provide an optional dynamic mechanic for handling chases in an Action! System game. The Action! System vehicle section has combat rules for most vehicular situations. The chase is another method of conceptualizing the situation.

During a chase, one mecha (or sometimes one character) — the "predator" — is assumed to be trying to catch the other — the "prey."

The predator and prey may be flying, running, driving, swimming, or engaging in almost any other conceivable method of movement. For conciseness, the wording of these rules assumes that both predator and prey are in mecha, though it can apply equally to characters on foot or riding mounts of some kind. These rules work just as well for chases on horseback as they do for vehicle chases.

## **Terrain**

The GM and players should have an idea of the terrain in which a chase is taking place before getting started. Terrain establishes the general conditions of a chase, as well as obstacles to be avoided.

### **Open Terrain**

Open terrain is easy to traverse, with only slight changes in elevation and few imposing obstacles. Examples are: wide, flat plains; large, open areas with few obstructions; clear skies at high altitude; open seas; racetracks; highways.

In open terrain, the speed of the chase begins at the "running" speed (x2 MOV) of the fastest mecha involved. Open terrain chases, in which one mecha's maximum speed is less than three-quarters that of its opponent; are usually over before they start.

A mecha's Manoeuvrability Attribute is critical in open terrain, and the mecha with the highest REF receives a +2 bonus to all piloting skills whilst in the chase. If only one mecha in the chase is considered to be in open terrain (either due to two or more types of terrain, Abilities, or mixed movement types) then that mecha automatically receives the +2 speed bonus.

By its very nature, open terrain contains few large, hard obstacles. The GM should roll 1d6 each chase turn, which occurs in open terrain — a result of 1 indicates an obstacle of TN 12 (see **Obstacles, page 197**).

Even if a collision occurs in open terrain, mecha usually carry on with little or no damage. Critical failures in open terrain are particularly bad, however, as the mecha involved are typically moving as fast as possible.

### **Close Terrain**

Close terrain is generally narrow and filled with plenty of stuff to run into, clip, and burst through. Typical examples

include narrow alleys, open areas with many obstructions, or air combat at low altitudes.

Due to the difficult conditions, the speed of a chase in close terrain begins at the fastest mecha's base movement attribute. The GM should roll 1d6 each turn for a chase that occurs in close terrain — a result of 1 indicates an obstacle of TN 15 (see **Obstacles, page 197**).

### Tight Terrain

This is the most dangerous of all terrain, filled with sharp drops and large, dense obstacles. Typical examples include stairways, corridors, busy highways, boulder-strewn areas, white water rapids, and aerial battles at treetop levels.

In tight terrain, the speed of a chase begins at the fastest mecha's cautious movement (half MOV attribute). Such close quarters favour highly responsive mecha, and so if both predator and prey are in tight terrain, the mecha with the highest Manoeuvrability value (or the mecha suit which pilot has the highest Reflexes) gains an additional +1 modifier to all Piloting skills.

Tight terrain is unstable, and mecha in these areas should be prepared for anything. The GM should roll 1d6 each chase turn that occurs in tight terrain — a result of 1 indicates an obstacle of TN 18 (see **Obstacles, page 197**).

### Initial Lead

The distance between mecha during a chase is called the "lead," and is scaled in lengths. In most cases, one length equals 3m (10ft). The GM should adjust the scale of the length depending on the conditions of the chase. For example, a chase between two aircraft might use lengths of 30m (100ft) while a fight between two starfighters might be measured in 300m lengths.

At no time can the lead be less than zero or greater than 30 "lengths". If any effect reduces the lead to less than zero, the lead becomes zero. Similarly, if any result increases the lead above 30, the lead becomes 30.

Chases can start in a number of ways, but most boil down to one of two categories: predator-initiated and prey-initiated. This determines how much of a lead the prey has at the start of the chase. When the predator begins a chase, the initial lead is equal to 2d6+3 lengths (usually 18m to 50m). When a chase begins with the prey fleeing, the initial lead is 2d6+8 lengths (usually 30 to 60m). If there is no clear initiator in a chase, both sides roll Initiative and the highest result is considered to have started the chase.

### Chase Movement

Chase speed is measured in meters per turn (or yards per turn) and is determined by terrain at the start of the chase. Chase movement changes throughout the pursuit according to the manoeuvres chosen by the mecha each turn.

Whenever the chase speed exceeds the maximum speed of one of the mecha at the end of a chase turn, the mecha is dealt 2d6 HITS to simulate engine or frame damage.

This damage is not reduced by Armour Value or other effects, and is in addition to all damage caused by manoeuvres, crash saves, and other effects.

### Chases: Step By Step

There are seven steps to chases, which are explained in broad strokes here and then in detail in the following sections. These seven steps continue in cycles until the chase ends — either with the capture or escape of the prey.

1. **INITIATIVE ROLL:** As per normal combat, opposing characters roll their mecha or personal initiative attributes to see whether the prey or the predator chooses the chase manoeuvre. The difference between normal combat and a chase is that only the initiative winner gets to act in the turn.
2. **CHOOSE MANEUVER:** The winning mecha (or group of mecha) chooses a manoeuvre from the list offered. Each manoeuvre has strengths and weaknesses, and is usually geared towards a specific goal. However, the REF attribute of the losing mecha comes into the manoeuvre's TN calculation.
3. **PILOTING SKILLS:** The mecha operators make a Piloting skill roll (or other appropriate rolls for non-mecha; Riding, Acrobatics, Swimming, or Climbing for example). If the Target Number (TN) is achieved, the manoeuvre succeeds.
4. **RESOLVE MANEUVERS AND ADJUST LEAD:** The effects of the manoeuvre that succeeded are applied, and the number of lengths between the mecha is adjusted.
5. **OBSTACLES:** The GM rolls for obstacles.
6. **OTHER ACTIONS:** Assuming the chase continues, each passenger of each mecha may perform a full action or a move and a standard action. An operator may perform either a move action or a standard action in addition to operating the mecha, but receives a -4 penalty to the next mecha operation-related save or roll (such as a Driving or piloting skill or attack) if he or she does so.
7. **DAMAGE AND COLLISIONS (IF ANY):** If warranted, mecha operators make Driving or Piloting Skill rolls to see if their mecha have collided with anything

#### Step One: Initiative

Mecha initiative is a combination of the pilot's initiative attribute and the mecha's INI attribute. Initiative in chases is rolled exactly the same way as normal Action! System combat. The winning mecha may choose to defer the decision on a manoeuvre to the loser for some tactical reason dependent on the situation

#### Step Two: Choose Manoeuvres

The first step during each chase turn is choosing manoeuvres.

There are two types of manoeuvre: predator and prey.

Due to the abstract nature of chases, the distance covered and the specific locations of each mecha are left up to the imagination of the GM and players. What's important is the distance between them at any given time. The initial lead is determined as part of getting started, but should be rechecked at the start of each turn. Many manoeuvres may only be chosen by mecha with a certain minimum or maximum lead.

Ultimately, the goal of the predator is to decrease the lead enough that it can perform one of the finishing manoeuvres (see below) and catch the prey, while the prey is trying to do a finishing manoeuvre that allows it to escape. Chases

continue until either the predator or prey successfully performs a finishing manoeuvre, someone crashes, or one of the mecha is disabled (see Step 7).

## Manoeuvre Descriptions

---

The following elements go into the description of each manoeuvre.

The GM may modify or disallow certain manoeuvres depending on the specific circumstances of the chase.

**TN Modifier:** Depending on Initiative winner, the TN modifier listed in each manoeuvre is added to the predator or prey's REF attribute for the final Target Number for the manoeuvre to succeed. The winner must roll a Piloting skill roll based on the mecha's REF to succeed.

**Lead:** Minimum or maximum distance between predator and prey required to perform the manoeuvre.

**Movement:** Succeed or fail, both the predator and prey's manoeuvres may modify the current chase MOV.

**Effect:** The effects of the manoeuvre, when the mecha that chose it wins that turn's opposed Driving or piloting skill roll. Sometimes the Effect Number of the roll (the amount the roll beat the TN by) comes into play for bonuses to lead or occupant combat rolls.

**Special:** Any additional information or conditions.

## Predator Manoeuvres

If the Predator wins the initiative roll, the pilot must decide which manoeuvre to use in the quest to close the gap on it's Prey.

### Box In (Finishing)

---

It takes skill to trap an opponent with minimal damage.

**TN Modifier:** 15

**Lead:** 5 lengths or less.

**Effect:** The predator wins the chase, forcing the prey into a corner from which there is nowhere to run.

### Crowd (Finishing)

---

Crowding is getting right up into the prey's backside and forcing it into a collision with the environment.

**TN Modifier:** 15

**Lead:** 2 lengths or less.

**Effect:** The predator wins the chase by forcing the prey into an obstacle. If the Effect Number of predator's Driving or piloting skill roll against the prey's is at least 3, the prey collides with an obstacle of the GM's choice.

The prey is treated as though it failed a crash save (see Step 7). If the predator's Driving or piloting skill roll effect number is less than 3, then the prey may still make a crash save to avoid a damaging collision, though the chase is still over as the vehicle is forced to stop to avoid the collision. The predator, regardless, stops safely.

### Cut Off (Finishing)

---

Without warning, the predator speeds up and pulls out in front of the prey, cutting him or her off. The predator's mecha becomes a barrier to stop the prey from escaping.

**TN Modifier:** 18

**Lead:** 0 lengths.

**Movement:** Chase speed is reduced by 35 meters per turn (around 40kph/25mph).

**Effect:** The predator wins the chase. If the prey fails it's Driving or piloting skill roll, it collides with the predator; no crash save is required. Damage is applied to both mecha, as per the Step 7 directions.

## Gun It

---

Gun It is the basic predator manoeuvre, in which the predator attempts to catch up with the prey in a straightforward manner.

**TN Modifier:** 18

**Lead:** Any distance.

**Movement:** Increase the chase speed by 15 meters per turn (around 20kph/10mph)

**Effect:** The lead is reduced by a number of lengths equal to the Effect Number from the Driving or Piloting Skill roll.

## Herd

---

Forcing the prey to make bad choices can be as effective as chasing him down. By keeping the pressure on and cutting off the prey's options, the predator uses strategy and brute force to drive the prey into dangerous situations.

**TN Modifier:** 18

**Lead:** 10 lengths or less.

**Effect:** The lead is reduced by one length and the prey is required to make a crash save, with a TN determined by the chase setting and increased by the difference between the Driving or Piloting Skill rolls. The predator must also make a crash save this turn (with no additional penalty).

**Special:** By beating the TN by three or more, the predator may choose to reduce both the predator and prey's crash save TNs by 3 to shift the terrain by one step at the end of the turn (open or tight becomes close and vice versa). Alternatively, the predator may ignore the crash save.

## Jockey (Vehicle Only)

---

By carefully matching the prey's movements, the predator can force the relative speeds of the two mecha down to almost zero, stabilizing the chase so that others in the vehicle can attack.

**TN Modifier:** 15

**Lead:** 10 lengths or less.

**Effect:** The lead is reduced by one length and the driver and all passengers in the predator vehicle gain half the difference of any TN Effect Number from the Driving or Piloting Skill roll (round down); as a bonus to their attack rolls targeting the prey.

### Ram (Finishing)

Ram is straightforward: the predator speeds up and slams into the prey, forcing it off the road. It's dirty, but often gets the job done a lot faster than Crowd.

**TN Modifier:** 12

**Lead:** 5 lengths or less.

**Effect:** The predator wins the chase, colliding with the prey. Both mecha are treated as though they failed crash saves (see Step 7). They then come to a halt.

### Red line

Red line is an advanced version of Gun It, during which the predator suddenly accelerates to and remains at its top speed. This causes incredible wear and tear on the mecha as its power plant literally burns up (or an animal strains itself, etc.).

**TN Modifier:** 18

**Lead:** Any distance.

**Movement:** Increase the chase speed by 30 meters per turn (around 35kph/20mph)

**Effect:** The lead is reduced by a number of lengths equal to twice any effect number of the Driving or Piloting Skill roll. The predator is dealt 2d6 damage (a vehicle can ignore this damage if it currently has a Booster activated; see [page 128](#)).

### Shortcut

Shortcuts can be helpful in catching up with prey, especially in close quarters, where the prey cannot see what the predator is doing. Unfortunately, this generally means that the predator has reduced its line of sight as well, which can result in a nasty spill.

**TN Modifier:** 12

**Lead:** Any distance.

**Movement:** The chase speed is reduced by 20 meters per turn (around 25kph/15mph).

**Effect:** The lead is reduced by a number of lengths equal to twice any effect number of the Driving or Piloting Skill roll. The predator must make a crash save during Step 7.

### Prey Manoeuvres

All prey manoeuvres are geared towards escaping the predator. If initiative is won, the prey gains the advantage and attempts one of the following applicable manoeuvres to distance themselves from the predator.

### Barnstorm (Finishing)

"Barnstorming" is usually associated with planes, but any vehicle may attempt it. A car can storm a shopping mall, or a boat can storm the wreckage of an oil tanker.

**TN Modifier:** 18

**Lead:** 25 lengths or more.

**Effect:** The prey wins the chase, barrelling through a cluttered area, throwing the predator if its trail in the chaos. The prey's vehicle is dealt 5d6 damage. Both predator and prey must make crash saves during Step 7.

### Bootlegger Turn

The prey brakes and turns hard to one side, suddenly changing direction. This can suddenly increase the prey's lead.

**TN Modifier:** 15

**Lead:** 10 lengths or less.

**Movement:** The chase speed is reduced by 20 meters per turn (around 25kph/15mph).

**Effect:** The lead is increased by equal to twice any effect number of the Driving or Piloting Skill roll, in lengths. The prey must make a crash save.

### Hairpin Turn (Finishing)

Hairpin Turn forces the predator down an erratic path as both mecha speed around tight bends and whip around blind curves until one falls out of the race. Hairpin turns tend to be longer and far sharper than those taken with Obstacle Course, resulting in a much greater chance of crashing.

**TN Modifier:** 18

**Lead:** 20 lengths or more.

**Movement:** The chase speed is reduced by 35 meters per turn (around 40kph/25mph)

**Effect:** The prey wins the chase, taking a turn the predator cannot manage. Both the predator and prey must make crash saves during Step 7.

### Lure

In many ways, the prey controls the direction of the chase, and can lead the predator into all kinds of foolish situations.

**TN Modifier:** 15

**Lead:** Any distance.

**Effect:** The lead is increased by one and the predator is required to make a crash save with a TN determined by the chase setting and increased by any effect number of the Driving or Piloting Skill roll. The prey is also required to make a crash save this turn (base TN of the chase setting).

**Special:** By beating the manoeuvre TN by 3 or more, the prey may choose to reduce both the predator and prey's crash save TNs by 3 to shift the terrain by one step at the end of the turn (open or tight becomes close and vice versa).

Furthermore, if the prey beats the manoeuvre TN by 3 or more using this manoeuvre, he or she may reverse the vehicles' positions, becoming the predator until the end of the current turn. The prey may attack the predator with forward-firing weapons during Step 5.

### Obstacle Course

---

Obstacle Course involves purposefully clipping neighbouring obstacles, terrain and even other mecha in an attempt to direct them into the predator's path, slowing him or her down. Unfortunately, this increases the chance that one of the prey's "clips" may become a collision.

**TN Modifier:** 12

**Lead:** Any distance.

**Effect:** The lead is increased by a number of lengths equal to twice any effect number of the Driving or Piloting Skill roll. The prey must make a crash save during Step 7.

### Pull Ahead

---

This is the basic prey manoeuvre, attempting to get as far ahead of the pursuit as possible.

**TN Modifier:** 12

**Lead:** Any distance.

**Movement:** Increase the chase speed by 15 meters per turn (around 20kph/10mph)

**Effect:** The prey's lead is increased by a number of lengths equal to the TN Effect Number from the Driving or Piloting Skill roll.

### Set Up (Mecha Only)

---

Instead of running, the prey leads the predator on a merry chase, usually while exchanging fire.

**TN Modifier:** 15

**Lead:** 10 lengths or less.

**Effect:** The lead is increased by one. The driver and all passengers in the prey mecha gain half the difference of any TN Effect Number from the Driving or Piloting Skill roll (round down) as a bonus to all their attack rolls targeting the predator.

### Extreme Manoeuvres (Finishing)

---

Stunts are incredible feats of skill, such as leaping a car across a rising toll bridge or ducking a giant robot between the blades of a very large turbine. This sort of manoeuvre is usually just short of suicidal, and only the most talented, foolhardy, or desperate try such a "perfect" escape.

**TN Modifier:** 21

**Lead:** 20 lengths or more.

**Effect:** The prey wins the chase, performing a stunt the predator just can't manage. If the prey's Driving or piloting skill roll exceeds the predator's by at least 3, the predator must make a crash save in Step 7.

### Vanish (Finishing)

---

In a display of driving virtuosity and pure velocity, the prey leaves all pursuit behind, choking on dust.

**TN Modifier:** 18

**Lead:** 30 lengths.

**Movement:** Increase the chase speed by 30 meters per turn (around 35kph/20mph)

**Effect:** The prey wins the chase.

## STEP THREE: DRIVING OR PILOTING SKILL ROLLS

The winning mecha operator reveals his or her manoeuvre. Determine any changes to the chase speed this turn as a result of the manoeuvre. Each mecha operator makes a Driving or piloting skill roll (or other appropriate Skill check such as Ride or Swim; Reflexes attribute check can be made if on foot), applying the following additional modifiers:

- The mecha's Manoeuvring attribute (REF)
- Any speed bonuses gained from the terrain.
- Modifiers from appropriate Abilities, or Mecha Modules.
- Modifiers due to one or other mecha being in a damaged Condition (see Step 7).

If the mecha operator succeeds at the manoeuvre, the effects are applied during Step 3. If the mecha fails the roll to beat the manoeuvre's Target Number, the effects of the manoeuvre aren't applied, and the chase continues without any further effect from the manoeuvre other than speed changes.

## STEP FOUR: RESOLUTION

The effects of the winner's manoeuvre are applied to the chase. Remember that the lead cannot, at any time, be less than zero or over 30 lengths. If the winner chose a finishing manoeuvre, then the chase ends after the remainder of this turn's steps is completed. If not, the chase will continue with a new turn following Step 7, unless the chase ends because of obstacles, crash saves, or combat.

## STEP FIVE: OBSTACLES

The GM may wish to throw in some obstacles to add to the action. These can range from an overturned petrol tanker and sections of heavy road construction (ground chases) to overhead power cables or a firework display (air chases) to a low bridge or coral reef (water chases) to a locked door or concealed rabbit-hole (foot chases). An obstacle typically requires either a REF Attribute roll or Piloting skill against the obstacle's TN. If the check fails, the mecha operator must make a crash save during Step 7.

The prey makes his or her save or Piloting skill before the predator does. The terrain determines the base TN for avoiding an obstacle, but the GM may alter the TN by up to +/-2, depending on the size and complexity of the challenge.



Obstacles are intended as spice, not the focus of chases, and can be ignored completely by the GM. If the predator and prey get stuck in a rut, the GM should use obstacles to shake things up. If the mecha are keeping things dynamic, the GM should reserve obstacles for a more effective time. The frequency that obstacles crop up is based on the local terrain.

## Avoid Hazard

When a mecha tries to move through an area and altitude occupied by a hazard, the pilot must succeed on a Driving or Pilot skill check to avoid the hazard and continue moving. Structures larger than 1.5 m (5ft) across simply cannot be avoided. Also, if a pilot cannot make a skill roll, he or she automatically fails to avoid the hazard. In such cases, a collision occurs. The TN to avoid a hazard varies with the nature of the hazard.

On a failed check, the mecha hits the obstacle. For caltrops or a minefield, this means they make an attack against the mecha. An oil slick forces the drive to make a Drive or Pilot check (TN 15 plus a modifier based on the mecha's speed category equal to the Defence Modifier) to retain control of the mecha (see Losing Control). Failing to avoid an object results in a collision with the object (see the Collisions and Ramming rules).

### Typical Hazards

Hazard	TN	Note
Minor hazards	12	rough road, rough water
Medium hazards	15	ice, nails, flock of birds, sand bar
Major hazards	18	caltrops, oil slicks, shallow reef, windsheers
Very Small obstacle	10	tire, keg, fence post, buoy
Small obstacle	13	bicycle, oil drum, weather balloon
Medium obstacle	15	boulder, human, wreckage
Large obstacle	18	small building
Very Large obstacle	21	meteor, radio tower
Huge obstacle	24	lake, large spacecraft
Gargantuan obstacle	30	iceberg, skyscraper, space station

## STEP SIX: OTHER ACTIONS

Whether the chase has ended due to a finishing manoeuvre or not, all passengers are allowed one full action or a standard action and a move action. Any mecha operator may take one standard action or move action at the cost of a -4 penalty to his or her next Piloting skill. In most ways, combat during a chase follows the basic combat rules, with a few significant differences.

## Actions During Chases

During chases, creatures act in Initiative order as usual, but many actions are restricted or illogical.

**Initiative:** Initiative works normally during chases.

**Attack:** A passenger in a moving mecha has a -4 penalty to his or her attack rolls. The operator of a mecha has an -8 penalty to his or her attack rolls. Furthermore, the operator and all passengers take an additional -2 penalty for every full 40 meters per turn their mecha is travelling. Melee attacks can only be made if the prey's lead is 0 and/or the attacker is in or on the same vehicle as his or her target.

**Movement:** Movement actions may be taken, but a Balance check is needed in most cases. A Jump roll is required to leap between two moving mecha. Finally, if a character falls from a moving vehicle, he or she suffers damage equivalent to the vehicle's movement against the Movement Damage Table on [page 127](#). An option is to make a Acrobatics or Tumbling skill roll (TN 18, +2 for every full 20 meters per turn the vehicle was travelling when the crash occurred) to halve the damage and convert it to stun damage.

**Other:** Other actions may or may not be possible, at the GM's discretion. In general, only skills and abilities that don't require movement remain unaffected.

## STEP SEVEN: DAMAGE AND CRASHES

The last step in every chase turn is to apply damage (if any) to each mecha, and see if they have collided with the environment (or each other).

## Condition Summaries

There are four possible conditions that participants in a chase can be in.

**Mecha Okay:** The mecha is only lightly damaged, still having over half of its original Hit Points. There are no modifiers to the Piloting skill (or other appropriate Skill check such as Ride or Swim; a Reflexes check can be made if on foot).

**Mecha Crippled:** Any single attack causing up to 4x HLT in damage points (after subtracting any damage for armour) is critical damage that directly affects the pilot(s) of a mecha. The character must make an immediate crash save, with the TN increased by +3.

**Mecha Disabled:** A mecha or creature that has been reduced to zero Hit Points either stalls and comes to a halt, or topples over (if a walking rather than wheeled mecha). The driver must make an immediate crash save, with the TN increased by +9.

**Mecha Destroyed:** A mecha which has been reduced to a negative number equal to its maximum Hit Points has been completely destroyed. It rolls, skids, plummets, or stumbles to a halt, then falls to pieces, completely useless for any purpose (although it may now count as one or more Obstacles at the GM's discretion). Occupants of the mecha when it is destroyed are damaged as though they had jumped out of the vehicle (see [page 127](#)) at the speed it was moving before it crashed; a successful Acrobatics or Tumbling skill roll in this case means they jump free. Bear in mind that a Volatile mecha (see [page 153](#)) will explode shortly after being destroyed.

## Crash Save

Crash rolls should be made in three instances when:

- The mecha operator fails a Piloting skill to avoid an obstacle.
- A successful manoeuvre calls for one.
- The mecha is dealt x4 HLT or more damage in one attack, after taking into account its armour.

A crash save is a Piloting skill (or other appropriate Skill roll such as Ride or Swim), but a mecha operator makes only one such save each turn. The base TN for a crash save is based on the terrain for the chase. If a mecha operator is required to make multiple crash saves in a turn, he or she instead makes a single roll; adding 3 to the TN for each additional crash save called for during the turn.

Whenever a mecha operator fails a crash save, his or her mecha collides with the environment (or the other mecha, if the successful manoeuvre calls for it). A simplistic damage calculation for each vehicle (and occupant) equals 1d6 for every 10 meters per turn of vehicle speed, +1 point for every point by which the mecha operator failed his or her crash save (crashes at high speeds are often instantly fatal).

Each occupant of the mecha can make an Acrobatics or Tumbling skill roll (TN equal to the TN of the failed crash save) to jump free of the mecha, reducing the damage by half and converting it to stun damage.

## Conversions for Higher Movement Speeds

The chase rules reflect a typical mecha or modern vehicle game, where chases typically occur at around 130 to 190 kph (80-120mph). For a chase involving solely characters on foot, whom do not have the Speed Attribute, when a manoeuvre calls for speed to change, divide all MOV figures by 3. For faster-moving mecha chases, up to and including spacecraft, increase all movement figures by a factor of 2 or more. The suggested amounts are x2 MOV for chases taking place at around 320 to 640kph (200-400mph), x5 MOV for chases taking place at between 640 and 1,600 kph, and x10 MOV for chases taking place at over 1,600kph.

Dramatic space flight should convert MOV figures to percentage of light speed for chases, so a manoeuvre that would usually increase speed by 10 meters per turn increases it by 10% of the speed of light (or 0.1 C) instead.

Realistic or solar sail space flight games rarely use the chase rules, since the acceleration of the vehicles will likely be far too low in comparison to the distances between predator and prey — whichever vehicle starts to accelerate before the other will almost always win any “chase.” FTL games may convert the chase rules as appropriate to the typical speeds available.

Crash Roll Circumstance	TN
Open Terrain	12
Close Terrain	15
Tight Terrain	18
Every full 25 meters per turn of speed	+2
Each save or roll required in a turn beyond the first	+5

## MechASsemble and the Hex Map

Hex Maps are extremely useful tools for describing combat and the variables involved.

Movement is perhaps the trickiest of attributes to deal with when it comes to scaling to a hex map. Rather than assigning a straight conversion rule, we recommend using whichever scale is most convenient and dividing the score by the appropriate number. For example, in Human Scale, each hex on a map might represent 1 meter (the default measurement for a 1-inch scale map when using 25mm or 28mm figures). If players decide that during a scene in which the mecha are participating in an aerial dogfight that each hex represents 100 meters, then players would simply divide the Human Scale MOV score by 100. So a mecha with a flying MOV of 200 would have a scaled hex MOV of 2. Then an F-18 Hornet, which has a MOV of 1,800 in Human Scale, would have a scaled MOV of 18 when moving on the dogfight hex mat.

The following table shows how mecha MOV can be scaled to a hex depending on the size of the largest mecha on the hex map. For hex combat, there can be double the number of mecha in each hex for every size level under the Hex Size. This means 6 Large-sized mecha can occupy a Gargantuan Scaled Hex.

For ease of reference the MOV/Hex attribute can be added to the Mecha sheet if Hex-based combat is going to be a standard gaming technique.

Hex Size	Hex Scale	Hexes per Turn and Weapon Range	Modifiers
Realistic Spacecraft	G-Action	No MOV Modifier / Range ÷ 500	
Space Scale	500 m or yds	MOV & Range ÷ 500	
Jet Aircraft	200 m or yds	MOV & Range ÷ 200	
Propeller Aircraft	100 m or yds	MOV & Range ÷ 100	
Gargantuan/Helicopters	50 m or yds	MOV & Range ÷ 50	
Huge	20 m or yds	MOV & Range ÷ 20	
Very Large	10 m or yds	MOV & Range ÷ 10	
Large	2 m or yds	MOV & Range ÷ 2	
Medium (Human)	1 m or yd	No Modifier	

## Facing and Firing Arcs

Unlike with characters, when dealing with mecha, the mecha’s facing (the direction it’s pointing) is important. Facing indicates the direction in which the mecha is travelling (assuming it’s not moving in reverse). It can also determine which weapons aboard the mecha can be brought to bear on a target.

A weapon built into a mecha can be mounted to fire in one of four directions—forward, aft (rear), right, or left—or be built into a partial or full turret. A torso mounted weapon or partial turret lets a weapon fire into three adjacent fire arcs



(such as forward, left, and right), while arm mounted weapons or full turrets allow fire in any direction. For mecha with weapons, a weapon's arc of fire is given in the mecha's description if the "turret" or "limited field of fire" restrictions are taken.

## Line of Sight (LOS)

The target cannot be seen either by sensor or visually if there are interfering objects in the way. Calculate how many hexes that sensors such as thermal imaging and x-ray scanning are effective to. These types of scanners enable a rough idea of a mecha's position behind obstructions but not well enough for an aimed target lock.

The simple rule for LOS is that a mecha cannot see past an obstruction rated to the same height as the mecha or taller. A mecha can see other mecha if it is at least one size level higher than the obstruction.

## Initiative

Initiative is determined just as in normal combat, where each Mecha rolls separately using the mecha's initiative modifier. With Hex Combat the winner of initiative may choose to use the Hold Action rule a great deal.

## Mecha and Character Movement

For the purposes of combat, mecha move on its pilot's Initiative (INI). Any passengers act on their own Initiative.

The listed MOV/Hex of each mecha is its hex movement score.

- **Cautious** speed is half or less of MOV/Hex in Turns. Weapons can be fired with the same modifiers as being stationary unless they have the static restriction.
- **Running** speed is up to twice the mecha's MOV/Hex in Turns.
- **Sprinting** speed is up to three times the mecha's MOV/Hex in Turns.

Once a mecha starts moving, it moves at the same speed each turn (on its pilot's Initiative) unless the pilot changes the speed. The pilot can increase or decrease a mecha's speed by one category per turn. Terrain modifiers in Hexes with designated obstacles may require a skill roll to traverse without failing a manoeuvre at high and top speeds.

## Missile Combat

Missile firing can be simplified Hex combat. The attacker must still establish a target lock as per normal. However Missile combat is simplified to the target mecha shooting down or evading the missile's TN with a Mecha Combat check. The missile **DEF = (TN + Dur - Speed)**. Evading means changing a facing or making a side-slip. Missiles will only ever take one action to close in on a target while in Hex Combat.

## Reverse

The maximum speed a mecha can move in reverse is cruising speed. While moving in reverse, all penalties to Pilot checks are doubled.

## Turning

Unless otherwise stated, a mecha may only be turned *up to* a total of 60 degrees in a single turn without performing a manoeuvre (see below).

## Side-slip

A pilot might wish to move to the side without changing the mecha's facing, for instance, to change lanes. This simple manoeuvre, called a side-slip, allows a mecha to avoid obstacles without changing facing. A side-slip moves a mecha 1 hex forward and 1 hex to the right or left, and costs 3 hexes of movement next turn.

## Torso Twist

Most humanoid mecha and turreted weapons have the option of maintaining a forward motion and twisting their weapons to bear on a new arc. Doing this means the character automatically loses initiative for that turn. Most animal-styled mecha cannot torso twist. With spacecraft, the torso twist also simulates vectoring in one direction while applying directional thrust to point the craft in another direction to lock onto a target.

## Terrain Modifiers

Certain types of terrain may cause a mecha some hardship. For Hex map combat this chart enables quick reference to for skill and Hex Movement modifiers.

Hex Terrain	Skill	MOV Modifier during Turn
Forest - Heavy	-4	Half MOV
Forest - Light	-2	-1 MOV/Hex
Heavy Snow*	-4	-2 MOV/Hex
Ice*	-6	-3 MOV/Hex
Mud	-4	-1 MOV/Hex
Paved Road	0	+1 MOV/Hex
Rough	-2	-1 MOV/Hex
Rubble	-4	-1 MOV/Hex
Steep Slope	-2	-1 MOV/Hex
Water Gargantuan depth **	-6	Half MOV
Water Large depth	-4	-3 MOV/Hex
Very Large structure *	-2 (Min STR 20)	-10 MOV + 1 per STR attribute over 20
Huge structure *	-4 (Min STR 30)	-10 MOV + 1 per STR attribute over 30
Gargantuan structure *	-4 (Min STR 35)	-10 MOV + 1 per STR attribute over 35
Immense structure *	-4 (Min STR 40)	-10 MOV + 1 per STR attribute over 40

\* Building structures can be traversed via the roof or ploughed through depending on the mecha size vs the building size. The Mecha must be at least 2 sizes smaller than the building to be able to traverse it. Bridge, Road or Natural structures can only withstand mecha the same size or lower without turning the hex into rubble. The skill roll modifier relates to ramming through a building. If the STR attribute equation calculates to a Movement modifier higher than zero, treat movement as unimpeded.

\*\* Mecha are completely submerged.

---

## Skill Checks

A pilot usually doesn't have to make a Skill check unless something happens that might cause a failed manoeuvre. Specifically the operator must make a Skill check when he suffers personal damage or performs a repeated or extreme manoeuvre such as listed below.

---

## Hard Turn Stunt

After a pilot skill check (TN 18), the mecha moves forward half its Movement and turns between 90 and 180 degrees.

---

## Brake Stunt

A mecha may decelerate by more than one speed category per turn, coming to a dead stop from a Sprint (or equivalent). This increases the TN of the manoeuvre by +6.

---

## Pivot Stunt

After a pilot skill check (TN 18), the mecha moves at High speed and turns up to 120 degrees (i.e., up to 2 hex facings on a hex map) without slipping or otherwise losing control.

---

## Jump

Determine how far in Hexes the Mecha can jump (see Jumping Module). If stationary, the mecha may jump towards any adjacent hex and change to any facing. Mecha receive a bonus of +3 to their DEF while jumping or diving. This bonus lasts until their next action.

---

## Zigzag Run

When attempting to lower the mecha's chances of getting hit while charging, the mecha can perform a Zigzag run while still remaining in Hex's of larger size. This can only be done while running or sprinting, gives an additional +3 DEF bonus, but cuts the actual amount of hexes able to be moved by half.

---

## Melee Combat

Melee Combat occurs when two mecha occupy the same hex or when two mecha of the same scale as the hex scale are in adjacent hexes. The only limitation to melee fighting is that any mecha with its back arc directly facing another mecha cannot engage in melee combat until an action is taken to torso twist or make a simple hex facing turn towards the attacker.

---

## Failed Manoeuvres

Failing a Skill check while manoeuvring can be a bad thing. At the very least, it means that the attempted manoeuvre failed. If the pilot failed by more than 6 points, it can also mean that his mecha goes out of control.

Whenever a Skill check to perform a manoeuvre fails, consult the effects of a failed roll. GM can choose the effects depending on the combat situation and roll failure amount.

- **Minor Slip:** The mecha goes slightly out of control and moves erratically. The pilot suffers a -3 penalty to Pilot checks related to operating the mecha until he regains control.
- **Slip:** The mecha slides, involuntarily changing a hex facing left or right (GM call or 1d6 roll)
- **Skid:** The mecha goes into a skid, changing 2 hex facings right or left into an adjacent hex. If this brings it into contact with another object, there is the option of the collision rules ([see page 172](#)).

---

## Collisions and Ramming

A collision occurs when a mecha enters the same hex as another mecha or a solid object. Generally, when a mecha collides with another moving mecha, the target can attempt a Reflex save (TN 15) to reduce the damage by half. A simplistic robot damage system is to use each mecha's strength attribute damage against the other with the non-aggressor's strength level at -1. Otherwise see [page 172](#).

---

## Piloting Defensively

Just as in melee combat, one can fight defensively while fighting in a mecha, which grants a +2 dodge bonus to the mecha's Defence and applies a -4 penalty on attack rolls made by occupants of the vehicle. A pilot can also choose the total defence, action which grants a +4 dodge bonus to Defence but does not allow the pilot to attack (gunners or passengers take a -8 penalty on attack rolls). These modifiers last until the pilot's next round of actions.

---

## Hex Knockback

When a mecha gets hit, it may get knocked back from the sheer physical impact. If the total damage rolled for a successful attack (before subtracting any points for Force fields or Armour) is greater than the mecha's STR + A.V, the mecha is knocked back one hex or knocked down in the same spot (GM's choice based on the circumstance). A roll of 1-2 on 1d6 means the facing hasn't changed; 2-4 means a hex facing to the left and 5-6 means stumbling to the right. Smaller mecha may not necessarily get knocked back far enough in large hex scales, but their facing still may change.

---

## Regain Control

Whenever a pilot loses control of his mecha, he must perform this manoeuvre on his next action if he wishes to

regain control of the mecha. The pilot may not perform any other manoeuvre until he or she has succeeded at regaining control. If the Mecha is knocked down or over then the mecha will not be righted, next turn, until the mecha piloting roll is made.

#### **Manoeuvre TN**

Critical Battle Damage	21
Failed manoeuvre	18
Knocked Down	18
Regain Control	15

### **Critical Damage Effects**

Any single attack causing up to 4x HLT in damage points can cause one or more of the mecha's special modules (sensor, communication device, airlock, etc.) to be knocked out. The GM decides what was hit, or rolls according to the **Critically Hit Systems** table on page 182.

### **Pilot Injury**

If the mecha pilot is directly in the path of any penetrating damage, depending where the cockpit is situated on the hit location table, he or she takes the same B/S damage that the mecha sustained. This damage is halved on a Reflex save (TN 15). If the mecha has multiple key crew members, roll randomly to determine who was hit.

### **Aerial Evasion and Pursuit**

In Turn by Turn movement, by simply counting off hexes, it's impossible for a slow mecha to get away from a determined fast mecha without mitigating circumstances. Likewise, it's no problem for a fast mecha to get away from a slower one.

When the speeds of the two concerned mecha are equal, there's a simple way to resolve a chase: If one mecha is pursuing another, both are moving at the same speed, and the chase continues for at least a few turns, have them make opposed Reflex saves to see who is the faster over those turns. If the mecha being chased wins, it escapes. If the pursuer wins, it catches the fleeing mecha.

Sometimes a chase occurs overland and could last all day, with the two sides only occasionally getting glimpses of each other at a distance. In the case of a long chase, an opposed Will ability roll made by all parties determines which can keep pace the longest. If the mecha being chased rolls the highest, it gets away. If not, the chaser runs down its prey, outlasting it with stamina.

## **Appendix A: Mecha in Campaigns**

The following section is a guideline for Game Masters whom are incorporating the MechASsemble rules into a campaign. The guidelines will deal with characters, points (both mecha and character), the allowable Mecha Modules and Defects and even size levels. Of course Game masters who are adding mecha into an existing campaign may not need a few of the details in this check-list but they should still browse to see if they have everything planned for their MechASsemble experience.

### **Step 1: Campaign Power and Realism Levels**

The campaign power level will aid in building mecha with capabilities that do not step outside the boundaries of the game's realism. The mecha realism level does not necessarily match the level of character abilities. For example, Average Powered characters could be piloting Extremely high powered mecha if the campaign demands it.

#### **Mecha Campaign Levels**

##### Realistic Campaigns

**Low-powered Street/Soldier Level — 200 Mecha Points:** This will buy the kind of vehicles and mecha one would expect in a game about street-level operatives, like bounty hunters or gangsters.

**Average-powered Agent Level — 400 Mecha Points:** This will buy the kind of gear that super agents or cyberpunk animé heroes have.

##### Cinematic Campaigns

**High-powered Mecha Troopers Level — 800 Mecha Points:** This will buy a one-man mecha roughly as powerful as a modern-day battle tank or jet fighter.

**Very high-powered Super Mecha Level — 1,200 to 1,600 Mecha Points:** This will buy a mecha that is far beyond any modern day fighting machine.

##### Extreme Campaigns

**Cosmic-powered Guardians Level — 2,000 to 2,400 Mecha Points:** This will buy a mecha that is potentially world-shaking in its power.

The campaign level does not necessarily define the Realism levels however. While the lower powered games by sheer mathematical limitations prohibit most forms of extraordinary abilities in a character or mecha, the game master may have a campaign in mind where fantasy elements still exist.

### **Step 2: Mecha Technology**

New Mecha attributes could be required for campaign mechanics and flavour (see **Appendix B: Mecha Attributes**). These attributes would enable the game master to derive rules from mecha point costs or damage or similar.

There are various modules and defects that will not be compatible with a campaign reality. Of course if a power player successfully conceptualizes a module or defect in a campaign-realistic way, which the Game Master hasn't thought of, then kudos to him or her. It still remains the domain of the G.M on whether a Module or Defect is allowable. The

Game Master must also have the final say on any Exotic Mecha Modules or Defects imported from the Assembler Core. The GM may also opt to make some Modules more expensive.

### Modules Check-list

---

- ☐ Accessories
- ☐ Artificial Intellect (A.I.)
- ☐ Booster
- ☐ Burrowing
- ☐ Creature - Styled Weaponry
- ☐ Communications
- ☐ Composite-Laminate Armour
- ☐ Countermeasures
- ☐ Ejection Seat/Life Pod
- ☐ Electromagnetic Armour
- ☐ Electronic Counter-Measures (ECM)
- ☐ Energy Absorption
- ☐ Environmental Systems
- ☐ Explosive Reactive Armour (ERA)
- ☐ Extra Arms
- ☐ Firing Ports
- ☐ Force Field
- ☐ Gestalt Mecha Merging
- ☐ Hangar (Giant Robot or Vehicle only)
- ☐ Headlights or Searchlight
- ☐ Jumping
- ☐ Laser Designator
- ☐ Launch Catapult
- ☐ Mach Booster
- ☐ Mind-Interface System
- ☐ Navigation Aids
- ☐ Orbital Velocity
- ☐ Parachute or Re-entry Shield
- ☐ Reflective Coating
- ☐ Remote Control
- ☐ Rooms (Vehicle Only)
- ☐ Self-Repair or Regeneration
- ☐ Sensors
- ☐ Sensor Cloaking System
- ☐ Sensory Jamming Field
- ☐ Shield
- ☐ Special Mecha Movement
- ☐ Stabilization Gear
- ☐ Stealth
- ☐ Summonable
- ☐ Super-Modules
- ☐ Swing-Wing Design
- ☐ Transformation

### Defects Check-list

---

- ☐ Alien Design
- ☐ Antiquated
- ☐ Dependent Module
- ☐ [Direction]-Optimized Armour
- ☐ [Direction]-Susceptible HITs
- ☐ Easily Crippled
- ☐ Exotic Power Source
- ☐ Flammable
- ☐ Glider
- ☐ Hangar Queen
- ☐ Hidden Program or Purpose
- ☐ High Ground Pressure (HGP)
- ☐ Hovercraft
- ☐ Involuntary Change
- ☐ Module Reduction
- ☐ Naked Operator
- ☐ Noisy or Very Noisy
- ☐ One Hand/No Hand (Giant Robot only)
- ☐ Open
- ☐ Poor Visibility

- ☐ Prone to Damage
- ☐ Reduced Endurance
- ☐ Restricted Path
- ☐ Road Vehicle (Vehicle Only)
- ☐ Service Crew
- ☐ Stall Speed
- ☐ Start-Up Time
- ☐ Susceptibility
- ☐ Trailer (Vehicle only)
- ☐ Unique Defect
- ☐ Uses Energy
- ☐ Volatile
- ☐ Weak Point
- ☐ Windows
- ☐ Wind-Powered (Vehicle-Only)
- ☐ Wings

### Step 3: Weapon Power

To prevent an arms race with armour and HITs vying for supremacy over weapon damage the Game Master can opt to put limits on both depending on the campaign level. Keep in mind that the higher level games tend to have mecha that tear through tank armour like tissue paper. The table tries to give some teeth to an average powered tank firing against a very high-powered mecha. But only enough teeth that the mecha pilot would probably sneer and stomp it into the permacrete. This chart is a guide and Game Masters should set their own maximums depending on their campaign. Some special weaponry will also not be appropriate for some settings.

#### Campaign's Suggested Maximum Levels

Power Level	A.V	HITs	Damage
Low-powered game	40	50	10d6
Average-powered game	60	60	15d6
High-powered game	60	100	2d6×10
Very high-powered game	100	200	3d6×10
Extreme-powered game	150	300	5d6×10
Titanic-powered game	No Limit	No Limit	No Limit

### Step 4: Mecha Themes and Skills

Is the campaign a post-tactical nuclear exchange world where the characters have built their own tank out of salvaged components? Is the campaign the start of a golden age for man with the advent of Alien<sup>TECH</sup> transformable mecha and space exploration? While tied to Step 2 and 3, the mecha theme allows a G.M and players to follow a design path that will keep mecha similarly powered. The theme will tend to tie in similar defects for mecha within that campaign.

#### Example Themes

Steam Punk Giants  
 Alien<sup>TECH</sup> Modern Vehicles  
 Fantasy Airships  
 Spy Cars and Ninjas  
 Golem Animal Riders

#### Example Defects

Antiquated, High Ground Pressure, Very Noisy, Poor Visibility, Startup Time  
 Alien Design, Exotic Power Source, Hanger Queen  
 Wind Powered, Startup Time, Open, Flammable  
 Direction Optimized Armour, Windows, Hanger Queen, Reduced Endurance  
 Uses Energy, Weak Point, Exotic Power Source, Involuntary Change (Sunlight).

#### Pilot Skill

The default Piloting skill list consists of types of vehicles such as heavy aircraft, helicopters, jet fighters, aerospace craft, spacecraft, starships, heavy wheeled, powerboat, sailboat, ship, submarine, tracked, giant robot. These types may not suit a campaign however and a revamped list is needed. *For example a Fantasy Airships mecha type list could be something like: Sky Galleon, Sky Cutter, Sail Blimp, Air Dreadnought and Air-ski.*

### Step 5: Weapons Systems

The game master may wish to build individual mecha weapons systems so that players can simply plug in the allowable technology into their mecha. By using the weapons stat block a game master can keep control of the damage inflicted in a campaign. The stat block has a Mecha Point cost for players to incorporate into their design. This is an optional step.

#### Example high-powered weapon system

**Name:** MRR-20 Medium Range Rocket launcher.  
**Damage:** 10d6  
**Type:** Armour Penetrating Blast Attack  
**Acc:** -2 (can only stream 40rnds at target)  
**RMod:** +1  
**Maximum Range (MAX):** 600m  
**Rate of Fire:** 20/2 (20rnds every 2 turns)  
**Amm:** 200  
**Cost:**  $22 \times 10 \div 3 = 73$  MP  
**Notes:** Armour Penetrating, Extended Range, Automatic [5], Blast, Extra Ammo [2]; Front Fixed Arc, Slow Firing [2].

## Finishing Up

Above all, a Game Master should feel in control of a campaign and the mecha running around it. Players may feel overwhelmed with choices at first but with guidelines from the previous steps will aide in conceptualizing a mecha design from the assortment of options. If players wish to enhance the description of the mecha with exacting dimensions and thrust-to-weight ratios then feel free. As long as the description doesn't overrule the "effect" there is no need to worry about Mecha Point costs.

## Appendix B: Mecha Attributes

### Creating New Groups

The core mecha rules uses only a single Mecha attribute group. Some GMs will want to add their own attributes to mecha for their games. Adding attributes and keeping them compatible with the core rules is easy.

#### What to Call the Group

First you need to decide what the "realm" or "effect" of the group is. Is it for elemental abilities? Maybe you could call it the Element Group. Does it deal with science or magic? Do you want to expand on social abilities and skills? Create a Elemental Skill Group for the "Elemental Golem's of Tarsus IV" Campaign.

Next, you need to create three attributes for the new group. Each group has an attribute for "power," one for "aptitude," and one for "resistance."

For example, let's say you're adding an Element Group. You could create the new attributes Prowess (PRW), Control (CON) and Denial (DEN).

#### Do I Need Three Attributes?

If you don't want to create three new attributes, you could use one attribute for all three aspects of that group, but it is recommended that you use three attributes. The game system was designed with three attributes in each group.

#### Mecha Point Costs

Use the Mecha group to calculate costs for the Power, Aptitude and Resistance attributes (STR, HLT and REF respectively). The Size Modifier in the Power (STR) attribute will generally reflect the fact that bigger mecha have more "power."

### Example Mecha Attributes – The Fusion Group

The Battlefields of Lunaris are littered with the chassis of gigantic mecha and the bodies of their pilots. Each walking tank is powered by a fusion reactor which has the potential to cook the pilots from the inside as weapon output and movement forces the reactor to output more energy. This mecha game mechanic runs with the effects of heat on the pilot and the mecha itself.

**Capacity** (abbreviated CAP) is the "Power" attribute for the Fusion Group. The total energy that a mecha can output without moving or firing weapons is represented in this attribute. Each point of CAP is the total amount of weapon damage dice (DR) able to be fired in a turn without moving.

**Cooling** (abbreviated CLG) is the "Aptitude" attribute for the Fusion Group. The higher a character's CLG, the more better the mecha's capability for damping and dispersing heat.

**Containment** (abbreviated CON) is the "Resistance" attribute for the Fusion Group. The higher a fusion reactor's containment rating, the more resistant it is to outputting dangerous levels of heat and radiation. Skills avoiding reactor breaches would be rolled against this attribute.

#### How would these attributes be used?

- Each weapon, with the unlimited shots quality, instead doubles the amount of damage dice able to be fired. Missiles automatically have double the CAP in Damage Rating. This means a mecha with a CAP of 8 theoretically can only fire a weapon that does 8d6 damage dice or a missile system that has a DR of 16(d6). A game master can then whip up weapon qualities and restrictions that expand on this heat vs weapons concept. The MOV speed multiplier (x1 Cruising, x2 Running or x3 Sprinting) also deducts 1, 2 or 3 points off the CAP depending on the mecha's speed that turn.
- The mecha has a base cooling attribute that represents how much power can be used that turn. After a weapon has been fired, deduct the DR used from the CAP attribute. The CLG attribute then recycles points back into the CAP attribute to calculate the available weapon dice able to be fired next turn.
- A pilot can still fire a weapon if there is not enough CAP attributes pooled. However this would strain the mecha's containment attribute. The mecha cannot fire more than the total of the CAP pool plus CON attribute in any given turn. Every time a pilot uses this "overpower" technique, the CON attribute is reduced by one.

### Mecha Maximum Speeds - Option

The Game master may choose to rule that the x2 "Run" speed is the maximum rated speed for the vehicle and the sprint speed is that little bit extra the mecha can go before the drive mechanism temporarily fails (HLT). In this case, any predefined mecha descriptions should be altered to increase MOV/Type by multiplying it one and a half. This means a vehicle listed, as having a top speed of 72kph and a MOV/Type attribute of 20, would need it's MOV increased to 30 (20x1.5). So when the vehicle is "running" at x2 Movement, the 60 MOV is equivalent to 72kph. This means the mecha is actually capable of exceeding its rated "top speed" for its HLT in minutes.

## Appendix C: Terrain

The following section allows Game Masters and Players to understand the various conditions that Mecha Combat can take place. The pilots of battle damaged vehicles with sensors down or simply low-tech mecha can find themselves in the same difficulties as if they were on foot.

Pilots operating bipedal or animal-based mecha, who also have the mecha melee combat skill can treat character based difficulty rolls the same for mecha. Mind Interface Equipped mecha can also traverse the terrain 'naturally'. Pilots without the mecha melee skill can perform all character based difficulty rolls with their mecha using the size DEF modifier as penalties.

### Getting Lost

There are many ways to get lost in the wilderness.

Following an obvious road, trail, or feature such as a stream or shoreline prevents any possibility of becoming lost, but travellers striking off cross-country may become disoriented—especially in conditions of poor visibility or in difficult terrain.

### Poor Visibility

Any time characters cannot see at least 20 meters in the prevailing conditions of visibility they may become lost. Characters travelling through fog, snow, or a downpour might easily lose the ability to see any landmarks not in their immediate vicinity. Similarly, characters travelling at night may be at risk, too, depending on the quality of their light sources, the amount of moonlight, and whether they have darkvision or lowlight vision.

### Difficult Terrain

Any character in forest, moor, hill, or mountain terrain may become lost if he or she moves away from a trail, road, stream, or other obvious path or track.

Forests are especially dangerous because they obscure far-off landmarks and make it hard to see the sun or stars.

### Chance To Get Lost

If conditions exist that make getting lost a possibility, the character leading the way must make a successful Navigation skill roll or become lost. The target number of this roll varies based on the terrain, the visibility conditions, and whether or not the character has a map of the area being travelled through. Refer to the table below.

Terrain	TN
Moor or hill	12
Mountain	15
Forest	18
Poor visibility	+3
No map	+3

Characters with the Geography, Survival or applicable Area Knowledge skill may use them as complementary to the Navigation skill (at the GM's discretion).

Characters possessing more than one of these skills use the one with the highest skill level as complementary to the Navigation skill for the skill roll.

Check once per hour (or portion of an hour) spent in movement to see if travellers have become lost. In the case of a party moving together, only the character leading the way makes the check (making it important to have a good guide or point man leading the party).

### Effects Of Being Lost

If a party becomes lost, it is no longer certain of moving in the direction that it intended to travel. Randomly determine the direction in which the party actually travels during each hour of local or overland movement.

Roll 1d6 and consult the table below.

The characters' movement continues to be at random until they blunder into a landmark they can't miss, or until they recognise that they are lost and make an effort to regain their bearings. The random direction is equivalent to a hex facing.

#### Random Direction of Travel

##### 1d6 Direction

- 1 Correct direction
- 2 Ahead to the left
- 3 Ahead to the right
- 4 Back to the left
- 5 Back to the right
- 6 Opposite direction

### Recognizing that You're Lost

Once per hour of random travel, each character in the party may attempt a Navigation skill roll (TN 18, -1 per hour of random travel) to recognise that they are no longer certain of their direction of travel. Some circumstances may make it obvious that the characters are lost.

#### Setting a New Course

A lost party is also uncertain of determining in which direction it should travel in order to reach a desired objective. Determining the correct direction of travel once a party has become lost requires a Navigation skill roll (TN 12, +2 per hour of random travel). If a character fails this check, he chooses a random direction as the "correct" direction for resuming travel.

Once the characters are travelling along their new course, correct or incorrect, they may get lost again. If the conditions still make it possible for travellers to become lost, check once per hour of travel as described in *Chance to Get Lost*, above, to see if the party maintains its new course or begins to move at random again.



Conflicting Directions

It's possible that several characters may attempt to determine the correct direction to proceed after becoming lost. Make a Navigation skill roll for each character in secret, then tell the players whose characters succeeded the correct direction in which to travel, and tell the players whose characters failed a random direction they think is right.

Regaining Your Bearings

There are several ways to become UN-lost. First, if the characters successfully set a new course and follow it to the destination they're trying to reach, they're not lost any more. Second, the characters through random movement might run into an unmistakable landmark. Third, if conditions suddenly improve—the fog lifts or the sun comes up—lost characters may attempt to set a new course, as described above, with a +3 bonus on the Navigation skill roll. Finally, technology or other supernatural ability may make their course clear.

Forest Terrain

Forest terrain can be divided into three categories: **sparse**, **medium**, and **dense**. An immense forest could have all three categories within its borders, with more sparse terrain at the outer edge of the forest and dense forest at its heart. The table below describes in general terms how likely it is that a given hex has a terrain element in it. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

Forest Terrain Features	Sparse	Medium	Dense
Typical trees	11+	9+	9+
Massive trees	—	15+	13+
Light undergrowth	11+	9+	11+
Heavy undergrowth	—	13+	11+

Trees

The most important terrain element in a forest is the trees, obviously. A creature standing in the same hex as a tree or in a hex adjacent to a tree gains a +1 bonus to DEF. The presence of a tree doesn't otherwise affect a creature's fighting space, because it's assumed that the creature is using the tree to its advantage when it can. The trunk of a small tree (less than 5 meters tall) has AV 10, and 15 Hits. The trunk of a medium tree (less than 15 meters tall) has AV 12, and 30 Hits. A Climbing roll (TN 15) is sufficient to climb a tree. Medium and dense forests have massive trees as well. These trees take up 7 hexes (a central hex and all 6 adjacent hexes) and provide full cover to anyone behind them. They have AV 14, and 60 Hits. Like their smaller counterparts, it requires a Climbing roll (TN 15) to climb them.

Undergrowth

Vines, roots, and short bushes cover much of the ground in a forest. A hex covered with light undergrowth costs 2 meters of movement to move into, and it provides concealment. Undergrowth increases the TN of REF-based skill and attribute rolls involving balance and Stealth skill rolls (to move quietly) by 2 because the leaves and branches get in the way. Heavy undergrowth costs 3 meters of movement to move into. It increases the TN of REF-based skill and attribute rolls involving balance and Stealth skill rolls (to move quietly) by 3. Heavy undergrowth is easy to hide in; granting a +3 bonus on Stealth skill rolls made to hide. Hexes with undergrowth are often clustered together. Undergrowth and trees aren't mutually exclusive; it's not uncommon for a hex to contain both a tree and undergrowth.

Forest Canopy

It's common for forest dwelling creatures to live on raised platforms far above the surface floor. These wooden platforms generally have rope bridges between them. To get to the tree houses, characters generally ascend the trees' branches (Climbing, TN 15), use rope ladders (Climbing, TN 12), or take pulley elevators (which can be made to rise a number of meters equal to the EN of a STR attribute roll, TN 15, made each turn as a special action). Creatures on platforms or branches in a forest canopy are considered to have partial cover when fighting creatures on the ground, providing a +3 DEF bonus when so concealed, and in medium or dense forests they have concealment as well.

Other Forest Terrain Elements

Fallen logs generally stand about one-half to one meter high and provide cover just as low walls do. They cost 2 meters of movement to cross. Forest streams are generally 2 to 3 meters wide and no more than 2 meters deep. Pathways wind through most forests, allowing normal movement and providing neither cover nor concealment. These paths are less common in dense forests, but even unexplored forests will have occasional game trails.

Stealth And Detection In A Forest

In a sparse forest, the maximum distance at which an Awareness skill roll for detecting the nearby presence of others can succeed is 1d6×10 meters. In a medium forest, this distance is 4d6×2 meters, and in a dense forest it is 3d6×2 meters. Because any hex with undergrowth provides partial concealment, it's usually easy for a creature to use the Stealth skill to hide in the forest. Logs and massive trees provide good cover, which also makes hiding possible. The background noise in the forest makes hearing-based Awareness rolls more difficult, increasing the TN by 1 per 2 meters (but note that Stealth skill rolls for moving quietly are also more difficult in undergrowth).

Forest Fires

Most camp-fire sparks ignite nothing, but if conditions are dry, winds are strong, or the forest floor is dried out and flammable, a forest fire can result. Lightning strikes often set trees afire and start forest fires in this way. Whatever the cause of the fire, travellers can get caught in the conflagration. A forest fire can be spotted from as far away as 1d6×75 meters by a character who makes an Awareness skill roll (TN

12), treating the fire as Gargantuan size (reducing any penalties for distance). If all characters fail their Awareness skill rolls, the fire moves closer to them. They automatically see it when it closes to half the original distance.

Characters who are blinded or otherwise unable to make sight-based Awareness skill rolls can feel the heat of the fire (and thus automatically notice it) when it is 30 meters away.

The leading edge of a fire (the downwind side) can advance faster than a human can run (assume 20 meters per turn for winds of moderate strength). Once a particular portion of the forest is ablaze, it remains so for 2d6×10 minutes before dying to a smoking smoulder.

Characters overtaken by a forest fire may find the leading edge of the fire advancing away from them faster than they can keep up, trapping them deeper and deeper in its grasp. Within the bounds of a forest fire, a character faces three dangers: heat damage, catching on fire, and smoke inhalation.

#### **Heat Damage**

Getting caught within a forest fire is even worse than being exposed to extreme heat (see *Heat Dangers*).

Breathing the heated air causes a character to suffer 1d3 points of Sp/L damage per turn. In addition, a character must make a HLT attribute roll every 5 turns (TN 18, +1 per previous roll) or take 1d3 points of Sp/S damage.

A character that holds his breath can avoid the lethal damage, but not the stunning damage. Those wearing heavy clothing or any sort of armour take a –3 penalty on their HLT attribute rolls.

In addition, those wearing metal armour or coming into contact with very hot metal suffer burning damage.

On the first turn, the metal becomes warm and uncomfortable to touch but deals no damage. During the second turn, intense heat causes pain and 2d6 B/L damage. In the third, and consecutive turns, the metal is searing hot, causing 2d6 P/L heat damage, as shown on the table below. If a character is underwater, the heat causes half damage and boils the surrounding water.

#### **Catching on Fire**

Characters engulfed in a forest fire are at risk of catching on fire when the leading edge of the fire overtakes them, and are then at risk once per minute thereafter.

#### **Smoke Inhalation**

Forest fires naturally produce a great deal of smoke. A character that breathes heavy smoke must make a HLT attribute roll each turn (TN 18, +1 per previous check) or spend that turn choking and coughing. A character that chokes for 2 consecutive turns takes 1d3 points of Sp/S damage. Also, smoke obscures vision, providing partial concealment (if outdoors) or total concealment (in enclosed areas) to characters within it.

### **Marsh Terrain**

Two categories of marsh exist: relatively dry **moors** and watery **swamps**. Both are often bordered by lakes (described in *Aquatic Terrain*, below), which effectively, are a third category of terrain found in marshes.

The table below describes terrain features found in marshes. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

Marsh Terrain Features	Moor	Swamp
Shallow bog	13+	12+
Deep bog	16+	13+
Light undergrowth	12+	13+
Heavy undergrowth	15+	14+

#### **Bogs**

If a hex is part of a shallow bog, it has deep mud or standing water of about ½ meter in depth. It costs 2 meters of movement to move into a hex with a shallow bog, and the TN of REF-based skill and attribute rolls involving balance (GM's discretion) in such a hex increases by 2.

A hex that is part of a deep bog has roughly 1 meter of standing water. It costs creature Medium-sized or larger 3 meters of movement to move into a hex with a deep bog, or characters can swim if they wish. Small or smaller creatures must swim to move through a deep bog.

Acrobatics and jumping are impossible in a deep bog. The water in a deep bog provides partial cover to creatures in it, based on how much of their body is exposed (see the *Core Rules*).

Deep bog hexes are usually clustered together and surrounded by an irregular ring of shallow bog hexes.

Both shallow and deep bogs increase the TN of Stealth skill rolls to move quietly by 2.

#### **Undergrowth**

The bushes, rushes, and other tall grasses in marshes function as undergrowth does in a forest (see *Forest Terrain*, above). A hex that is part of a bog does not also have undergrowth.

#### **Quicksand**

Patches of quicksand present a deceptively solid appearance (appearing as undergrowth or open land) that may trap careless characters. A character approaching a patch of quicksand at a normal pace is entitled to a Survival (TN 12) or Awareness (TN 18) skill roll to spot the danger before stepping in, but running or sprinting characters don't have a chance to detect a hidden bog before blundering in. A typical patch of quicksand is 7 meters in diameter (roll 2d6 for a random diameter in meters); the momentum of a charging or running character carries him or her 1d3 meters into the quicksand.

**Effects of Quicksand:** Characters in quicksand must make a Swimming skill roll (TN 12) every turn to simply tread water in place (or TN 18 to move ½ the character's base Movement score in whatever direction is desired). If a trapped character fails this check by 6 or more, he sinks below the surface and begins to drown whenever he can no longer hold his breath (see *Drowning* in the *Core Rules*).

Characters below the surface of a bog may swim back to the surface with a successful Swimming skill roll (TN 18, +1 per consecutive turn of being under the surface).

**Rescue:** Pulling out a character trapped in quicksand can be difficult. A rescuer needs a branch, spear haft, rope, or similar tool that enables him to reach the victim with one end of it. Then he must make a STR attribute roll (TN 15) to successfully pull the victim, and the victim must make a STR attribute roll (TN 12) to hold onto the branch, pole, or rope. If the victim fails to hold on, he must make a Swimming skill roll (TN 18) immediately to stay above the surface. If both checks succeed, the victim is pulled 2 meters closer to safety.

## Hedgerows

Common in moors, hedgerows are tangles of stones, soil, and thorny bushes. Narrow hedgerows function as low walls, and it takes 3 meters of movement to cross them. Wide hedgerows are more than 1.5 meters tall and take up entire hexes. They provide total cover, just as a wall does. It takes 5 meters of movement to move through a hex with a wide hedgerow; creatures that make a successful Climbing skill roll (TN 15) need only 2 meters of movement to move through the hex.

### Other Marsh Terrain Elements

Some marshes, particularly swamps, have trees just as forests do usually clustered in small stands. Paths lead across many marshes, winding to avoid bog areas.

As in forests, paths allow normal movement and don't provide the concealment that undergrowth does.

## Stealth And Detection In A Marsh

In a moor, the maximum distance at which a sight based Awareness skill roll for detecting the nearby presence of others can succeed is 2d6×10 meters. In a swamp, this distance is 3d6×3 meters.

Undergrowth and deep bogs provide plentiful concealment, so it's easy to hide in a marsh.

A marsh imposes no penalties on hearing-based Awareness skill rolls, and using the Stealth skill is more difficult in both undergrowth and bogs.

## Hills Terrain

A hill can exist in most other types of terrain, but hills can also dominate the landscape. Hill terrain is divided into two categories: **gentle hills** and **rugged hills**. Hill terrain often serves as a transition zone between rugged terrain such as mountains and flat terrain such as plains.

The table below describes terrain features found in marshes. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

Hills Terrain Features	Gentle Hill	Rugged Hill
Gradual slope	9+	12+
Steep slope	14+	11+
Cliff	16+	15+
Light undergrowth	14+	14+

## Gradual Slope

This incline isn't steep enough to affect movement, but characters gain a +1 elevation bonus on skill rolls for melee attacks against foes downhill from them (as per the *Core Rules*).

## Steep Slope

Characters moving uphill (to an adjacent hex of higher elevation) must spend 2 meters of movement to enter each hex of steep slope. Characters running or sprinting downhill (moving to an adjacent hex of lower elevation) must succeed on a Reflexes attribute roll (TN 12 if Running, TN 18 if Sprinting) upon entering the first steep slope hex. Mounted characters make a Riding skill roll instead. Characters who fail this roll stumble and must end their movement 1d3 meters later.

Characters who fail by 6 or more fall prone in the hex where they end their movement (GMs may impose B/S damage as if the character had fallen half the distance run). A steep slope increases the TN of REF-based skill and attribute rolls involving balance by 2.

## Cliff

A cliff typically requires a Climbing skill roll (TN 18) to scale and is 2d6 meters tall, although the needs of your map may mandate a taller cliff. A cliff isn't perfectly vertical, taking up two 1-meter hexes if it's less than 10 meters tall and three 1-meter hexes if it's 10 meters or taller.

### Light Undergrowth

Sagebrush and other scrubby bushes grow on hills, although they rarely cover the landscape as they do in forests and marshes. Light undergrowth provides concealment and increases the TN of REF-based skill and attribute rolls involving balance and Stealth skill rolls by 2.

### Other Hills Terrain Elements

Trees aren't out of place in hills terrain, and valleys often have active streams (2 to 3 meters wide and no more than 2 meters deep) or dry stream beds (treat as a trench 1 to 3 meters across) in them. If you add a stream or stream bed, remember that water always flows downhill.

## Stealth And Detection In Hills

In gentle hills, the maximum distance at which a sight-based Awareness skill roll for detecting the nearby presence of others can succeed is 1d6×10 meters. In rugged hills, this distance is 2d6×3 meters.

Hiding in hill terrain can be difficult if there isn't undergrowth around. A hilltop or ridge provides enough cover to hide from anyone below the hilltop or ridge.

Hills don't affect Awareness or Stealth skill rolls.

## Mountain Terrain

The three mountain terrain categories are **alpine meadows**, **rugged mountains**, and **forbidding mountains**.

As characters ascend into a mountainous area, they're likely to face each terrain category in turn, beginning with alpine meadows, extending through rugged mountains, and reaching forbidding mountains near the summit.

Mountains have an important terrain element, the rock wall, which is marked on the border between hexes rather than actually taking up hexes.

The table below describes terrain features found in mountains. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

<b>Alpine</b>	<b>Meadow</b>	<b>Rugged</b>	<b>Forbidding</b>
Gradual slope	11+	13+	14+
Steep slope	12+	10+	10+
Cliff	15+	14+	14+
Chasm	—	16+	15+
Light undergrowth	14+	15+	—
Scree	—	14+	13+
Dense rubble	—	14+	13+

### Gradual and Steep Slopes

These function as described in *Hills Terrain*, above.

#### Cliff

These terrain elements also function like their hills terrain counterparts, but they're typically 1d6×7 meters tall.

Cliffs taller than 25 meters take up 7 meters of horizontal space.

#### Chasm

Usually formed by natural geological processes, chasms function like pits in a dungeon setting. Chasms aren't hidden, so characters won't fall into them by accident (although shoving someone is another story). A typical chasm is 2d6×2 meters deep, at least 7 meters long, and anywhere from 2 to 7 meters wide (roll 1d6+1). It takes a Climbing skill roll (TN 18) to climb out of a chasm. In forbidding mountain terrain, chasms are typically 2d6×5 meters deep.

#### Light Undergrowth

This functions as described in *Forest Terrain*, above.

### Scree

A field of shifting gravel, scree doesn't affect Movement, but it can be treacherous on a slope. The TN of REF attribute rolls and Acrobatics skill rolls increases by 1 if there's scree on a gradual slope and by 3 if there's scree on a steep slope. The TN of Stealth skill rolls increases by 2 if the scree is on a slope of any kind.

### Dense Rubble

The ground is covered with rocks of all sizes. It costs 2 meters of movement to enter a hex with dense rubble. The TN of REF attribute rolls and Acrobatics skill rolls on dense rubble increases by 3, and the TN of Stealth checks to move quietly increases by +1.

### Rock Wall

A vertical plane of stone, rock walls require a Climbing skill roll (TN 21) to ascend. A typical rock wall is 2d6 meters tall in rugged mountains and 3d6×5 meters tall in forbidding mountains. Rock walls are drawn on the edges of hexes, not in the hexes themselves.

### Cave Entrance

Found in cliff and steep slope hexes and next to rock walls, cave entrances are typically between 2 and 7 meters wide (roll 1d6+1 for random width) and 2 meters deep. Beyond the entrance, a cave could be anything from a simple chamber to the entrance to an elaborate dungeon. Caves used as monster lairs typically have 1d3 rooms that are 2d6+1 meters across.

### Other Mountain Terrain Features

Most alpine meadows begin above the tree line, so trees and other forest elements are rare in the mountains.

Mountain terrain can include active streams (1 to 3 meters wide and no more than 2 meters deep) and dry stream beds (treat as a trench 1 to 3 meters across).

Particularly high-altitude areas tend to be colder than the lowland areas that surround them, so they may be covered in ice sheets (described below).

### Stealth And Detection In Mountains

As a guideline, the maximum distance in mountain terrain at which a vision-based Awareness skill roll for detecting the nearby presence of others can succeed is 2d6×3 meters. Certain peaks and ridge lines afford much better vantage points, of course, and twisting valleys and canyons have much shorter spotting distances. Because there is little vegetation to obstruct line of sight, the specifics on your map are your best guide for the range at which an encounter could begin. As in hill terrain, a ridge or peak provides enough cover to hide from anyone below the high point.

It's easier to hear faraway sounds in the mountains.

Distance penalties for hearing-based Awareness skill rolls are halved.

### Avalanches

The combination of high peaks and heavy snowfalls means that avalanches are a deadly peril in many mountainous areas. While avalanches of snow and ice are common, it's also possible to have an avalanche of rock and soil.

An avalanche can be spotted from as far away as 3d6×100 meters down slope by a character who makes an Awareness skill roll (TN 21). If all characters fail their Awareness rolls to determine the encounter distance, the avalanche moves closer to them, and they automatically become aware of it when it closes to half the original distance.

It's possible to hear an avalanche coming even if you can't see it. Under optimum conditions (no other loud noises occurring), a character who makes a hearing based Awareness skill roll (TN 15) can hear the avalanche or landslide when it is 1d6×75 meters away. This roll might have a TN of 18, 21, or higher in conditions where hearing is difficult (such as in the middle of a thunderstorm).

A landslide or avalanche consists of two distinct areas: the bury zone (in the direct path of the falling debris) and the slide zone (the area the debris spreads out to encompass). Characters in the bury zone always take damage from the avalanche; characters in the slide zone may be able to get out of the way. Characters in the bury zone take 12d6 points of B/L damage, or half that amount if they make a REF attribute roll (TN 18). They are subsequently buried (see below). Characters in the slide zone take 4d6 points of B/L damage or no damage if they make a REF attribute roll (TN 15). Those who fail their attribute rolls are buried.

Buried characters take 1d6+2 points of B/L crushing damage per minute until freed or dead.

The typical avalanche has a width of 1d6×30 meters, from one edge of the slide zone to the opposite edge.

The bury zone in the centre of the avalanche is half as wide as the avalanche's full width.

To determine the precise location of characters in the path of an avalanche, roll 1d6×7 meters; the result is the number of feet from the centre of the path taken by the bury zone to the centre of the party's location. Avalanches of snow and ice advance at a MOV of 75 meters per turn, and rock avalanches travel at a MOV of 40 meters feet per turn.

## Mountain Travel

High altitude can be extremely fatiguing—or sometimes deadly—to creatures that aren't used to it. Cold becomes extreme, and the lack of oxygen in the air can wear down even the most hardy of warriors.

### Acclimatised Characters

Creatures accustomed to high altitude generally fare better than lowlanders. Any creature associated with mountain environment in its description is considered native to the area, and acclimatised to the high altitude.

Characters can also acclimatise themselves by living at high altitude for one month. Characters who spend more than two months away from the mountains must re-acclimatise themselves when they return. Undead, constructs, animatrons, and other creatures that do not breathe (including characters with some form of life support or self-contained breathing apparatus) are immune to altitude effects.

## Altitude Zones

In general, mountains present three possible altitude bands: low pass, low peak/high pass, and high peak.

**Low Pass (lower than 1,700 meters):** Most travel in low mountains takes place in low passes, a zone consisting largely of alpine meadows and forests.

Travellers may find the going difficult (which is reflected in the movement modifiers for travelling through mountains), but the altitude itself has no game effect.

**Low Peak or High Pass (1,700 to 5,000 meters):** Ascending to the highest slopes of low mountains, or most normal travel through high mountains, falls into this category. All non-acclimatised creatures labour to breathe in the thin air at this altitude. Characters must succeed on a HLT attribute roll each hour (TN 15, +1 per previous check) or become fatigued. Fatigued characters cannot Run or Sprint and suffer a –3 penalty to all physical skill rolls. The fatigue ends when the character descends to an altitude with more air. Acclimatised characters do not have to attempt the HLT attribute roll.

**High Peak (more than 5,000 meters):** The highest mountains exceed 5,000 meters in height. At these elevations, creatures are subject to both high altitude fatigue (as described above) and altitude sickness, whether or not they're acclimatised to high altitudes.

Altitude sickness represents long-term oxygen deprivation, and it affects Mind and Body attribute scores. After each 6-hour period a character spends at an altitude of over 5,000 meters, he must succeed on a HLT attribute roll (TN 15, +1 per previous check) or suffer a temporary loss of 1 point from all attribute scores. Creatures acclimatised to high altitude receive a +3 bonus on their HLT attribute rolls to resist high altitude effects and altitude sickness, but eventually even seasoned mountaineers must abandon these dangerous elevations.

Attribute points lost from altitude fatigue are healed at the same rate as Lethal damage (see the *Core Rules*).

## Desert Terrain

Desert terrain exists in warm, temperate, and cold climates, but all deserts share one common trait: little rain. The three categories of desert terrain are **tundra** (cold deserts), **rocky desert** (often temperate), and **sandy desert** (often warm).

Tundra differs from the other desert categories in two important ways. Because snow and ice cover much of the landscape, it's easy to find water. And during the height of summer, the permafrost thaws to a depth of a foot or so, turning the landscape into a vast field of mud.

The muddy tundra affects movement and skill use as the shallow bogs described in marsh terrain, although there's little standing water.

The table below describes terrain features found in each of the three desert categories. The terrain elements on this table are mutually exclusive; for instance, a hex of tundra may contain either light undergrowth or an ice sheet, but not both. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

Desert Terrain Features	Tundra	Rocky	Sandy
Light undergrowth	14+	16+	16+
Ice sheet	13+	—	—
Light rubble	16+	12+	15+
Dense rubble	—	12+	16+

Desert Terrain Features	Tundra	Rocky	Sandy
Sand dunes	—	—	11+

Light Undergrowth

Consisting of scrubby, hardy bushes and cacti, light undergrowth functions as described for other terrain types.

Ice Sheet

The ground is covered with slippery ice. It costs 2 meters of movement to enter a hex covered by an ice sheet, and the TN of REF-based skill and attribute rolls involving balance increase by 5. A REF attribute roll (TN 15) is required to run or charge across an ice sheet.

Light Rubble

Small rocks are strewn across the ground, making nimble movement more difficult more difficult. The TN of REF-based skill rolls involving balance increase by 1.

Dense Rubble

This terrain feature consists of more and larger stones. It costs 2 meters of movement to enter a hex with dense rubble. The TN of REF-based skill and attribute rolls involving balance increase by 3 and the TN of Stealth skill rolls to move quietly increases by 1.

Sand Dunes

Created by the action of wind on sand, sand dunes function as hills that move. If the wind is strong and consistent, a sand dune can move a hundred meters or more in a week’s time. Sand dunes can cover hundreds of hexes. They always have a gentle slope pointing in the direction of the prevailing wind and a steep slope on the leeward side.

Other Desert Terrain Features

Forests sometimes border tundra, and the occasional tree isn’t out of place in the cold wastes.  
Rocky deserts have towers and mesas consisting of flat ground surrounded on all sides by cliffs and steep slopes (described in *Mountain Terrain*, above). Sandy deserts sometimes have quicksand; this functions as described in *Marsh Terrain*, above, although desert quicksand is a waterless mixture of fine sand and dust. All desert terrain is criss-crossed with dry stream beds (treat as trenches 2 to 5 meters wide) that fill with water on the rare occasions when rain falls.

Stealth And Detection In The Desert

In general, the maximum distance in desert terrain at which a vision-based Awareness skill roll for detecting the nearby presence of others can succeed is 2d6×20 meters; beyond this distance, elevation changes and heat distortion in warm deserts makes spotting impossible.  
The presence of dunes in sandy deserts limits spotting distance to 2d6×10 meters.  
The desert imposes neither bonuses nor penalties on Awareness skill rolls. The scarcity of undergrowth or other elements that offer concealment or cover makes hiding more difficult, increasing the TN of Stealth skill rolls by 3.

Sandstorms

A sandstorm reduces visibility to 3d6 meters and imposes a –3 penalty on Awareness skill rolls. A sandstorm deals 1d3 points of B/S damage per hour to any creatures caught in the open, and leaves a thin coating of sand in its wake. Driving sand creeps in through all but the most secure seals and seams, to chafe skin and contaminate carried gear.

Plains Terrain

Plains come in three categories: **farms**, **grasslands**, and **battlefields**. Farms are common in settled areas, of course, while grasslands represent untamed plains. The battlefields where large armies clash are temporary places, usually reclaimed by natural vegetation or the farmer’s plough. Battlefields represent a third terrain category because adventurers tend to spend a lot of time there, not because they’re particularly prevalent.  
The table below shows the proportions of terrain elements in the different categories of plains. On a farm, light undergrowth represents most mature grain crops, so farms growing vegetable crops will have less light undergrowth, as will all farms during the time between harvest and a few months after planting.  
The table below describes terrain features found in each of the three Plains categories. The terrain elements on this table are mutually exclusive. Roll 3d6; if the die roll total is equal to or greater than the number listed, that terrain element is present in the hex.

Plains Terrain Features	Farm	Grassland	Battlefield
Light undergrowth	12+	14+	15+
Heavy undergrowth	—	15+	—
Light rubble	—	—	15+
Trench	16+	—	16+
Berm	—	—	16+

Undergrowth

Whether they’re crops or natural vegetation, the tall grasses of the Plains function like light undergrowth in a forest. Particularly thick bushes form patches of heavy undergrowth that dot the landscape in grasslands.

Light Rubble

On the battlefield, light rubble usually represents something that was destroyed: the ruins of a building or the scattered remnants of a stone wall, for example. It functions as described in the desert terrain section above.

## Trench

Often dug before a battle to protect soldiers, a trench functions as a low wall, except that it provides no cover against adjacent foes. It costs 2 meters of movement to leave a trench, but it costs nothing extra to enter one.

Creatures outside a trench who make a melee attack against a creature inside the trench gain a +1 elevation bonus on melee attack rolls. In farm terrain, trenches are generally irrigation ditches.

## Berm

A common defensive structure, a berm is a low, earthen wall that slows movement and provides a measure of cover. Put a berm on the map by drawing two adjacent rows of steep slope (described in *Hills Terrain*, above), with the edges of the berm on the downhill side. Thus, a character crossing a four-hex berm will travel uphill for 2 hexes, then downhill for 2 hexes. Four hex berms provide cover as low walls for anyone standing behind them. Larger berms provide the low wall benefit for anyone standing 2 meters downhill from the top of the berm.

## Fences

Wooden fences are generally used to contain livestock or impede oncoming soldiers. It costs an extra meter of movement to cross a wooden fence. A stone fence provides a measure of cover as well, functioning as low walls. Mounted characters can cross a fence without slowing their movement if they make a successful Riding skill roll (TN 15). If the check fails, the steed crosses the fence, but the rider falls out of the saddle.

## Other Plains Terrain Features

Occasional trees dot the landscape in many plains, although on battlefields and areas bordering heavily populated areas they're often felled to provide raw material for siege engines or buildings. Hedgerows (described in *Marsh Terrain*) are found in plains as well.

Streams, generally 2 to 7 meters wide and 1 to 3 meters deep, are commonplace.

## Stealth And Detection In Plains

In Plains terrain, the maximum distance at which a sight-based Awareness skill roll for detecting the nearby presence of others can succeed is 2d6×40 meters, although the specifics of your map may restrict line of sight. Plains terrain provides no bonuses or penalties on Awareness skill rolls. Cover and concealment are not uncommon, so a good place of refuge is often nearby, if not right at hand.

## Aquatic Terrain

Aquatic terrain is the least hospitable to most PCs, because they can't breathe there. Aquatic terrain doesn't offer the variety that land terrain does. The ocean floor holds many marvels, including undersea analogues of any of the terrain elements described earlier in this section. But if characters find themselves in the water because they were shoved off the deck of a pirate ship, the tall kelp beds dozens or hundreds of meters below them don't matter. Accordingly, these rules simply divide aquatic terrain into two categories: flowing water (such as streams and rivers) and non-flowing water (such as lakes and oceans).

## Flowing Water

Large, placid rivers move at only a few miles per hour, so they function as still water for most purposes.

But some rivers and streams are swifter; anything floating in them moves downstream at a speed of 1 to 6 meters per turn. The fastest rapids send swimmers bobbing downstream at 10 to 15 meters per turn (roll 1d6+9 for random speed). Fast rivers are always at least rough water (Swimming skill roll, TN 15), and white water rapids are stormy water (Swimming skill roll, TN 18). If a character is in moving water, move her downstream the indicated distance at the end of her turn. \* A character trying to maintain her position relative to the riverbank can spend some or all of her turn swimming upstream.

- Alternately, GMs may use segmented movement, moving *the character each turn segment a distance equal to the total distance divided by the highest INI score for that turn, until the total movement is expended for that turn. For example, a character moves 10 meters in a turn and the highest INI rolled for all of the characters is 12. The character moves 1 meter downstream on INI 12, 11, 10, 9, and so on, until all of the movement is expended at the end of segment 3. No additional movement will occur until the next turn.*

## Swept Away

Characters swept away by a river moving 10 meters per turn or faster must make a Swimming skill roll (TN18) every turn to avoid going under. If the EN is 6 or higher, he arrests his motion by catching a rock, tree limb, or bottom snag—he is no longer being carried along by the flow of the water. Escaping the rapids by reaching the bank requires three successful Swimming skill rolls (TN 18) in a row. Characters arrested by a rock, limb, or snag can't escape under their own power unless they strike out into the water and attempt to swim their way clear. Other characters can rescue them as if they were trapped in quicksand (described in *Marsh Terrain*, above).

## Non flowing Water

Lakes and oceans simply require a swim MOV or a successful Swimming skill roll to move through (no roll required in calm water, TN 15 in rough water, TN 18 in stormy water). Characters need a way to breathe if they're underwater. Failing that they risk drowning.

When underwater, characters can move in any direction as if they were flying with perfect manoeuvrability.

## Stealth And Detection Underwater

How far you can see underwater depends on the water's clarity. As a guideline, creatures can see 3d6×5 meters if the water is clear and 2d6×2 meters if it's murky. Moving water is always murky, unless it's in a particularly large, slow-moving



river.

It's hard to find cover or concealment to hide underwater (except along the sea floor). Hearing-based Awareness and Stealth skill rolls function normally underwater.

**Invisibility**

An invisible creature displaces water and leaves a visible, body-shaped “bubble” where the water was displaced. The displacement can be spotted with a successful Awareness skill roll at –5. Characters may make attacks against the creature but still suffer a –5 penalty to the skill roll.

**Underwater Combat**

Land-based creatures can have considerable difficulty when fighting in water. Water affects a creature’s DEF, attack rolls, damage, and movement. In some cases a creature’s opponents may get a bonus on attacks. The effects are summarised in the accompanying table. They apply whenever a character is swimming, walking in chest deep water, or walking along the bottom.

**Ranged Attacks Underwater**

Thrown weapons are ineffective underwater, even when launched from land. Attacks with other ranged weapons take a –1 penalty on attack rolls for every meter of water they pass through, in addition to the normal penalties for range.

**Attacks from Land**

Characters swimming, floating, or treading water on the surface, or wading in water at least chest deep, have partial cover (+3 bonus to DEF) from opponents on land. A completely submerged creature has total cover (+5 DEF) against opponents on land. Magical effects are unaffected except for those that require attack rolls (which are treated like any other effects) and fire effects.

**Fire**

Non-magical fire (including alchemist’s fire) does not burn underwater. Spells or spell-like effects with the fire descriptor are ineffective underwater unless the caster makes a Spellcraft skill roll (TN 18 + spell level). If the check succeeds, the spell creates a bubble of steam instead of its usual fiery effect, but otherwise the spell works as described. A supernatural fire effect is ineffective underwater unless its description states otherwise.

The surface of a body of water blocks line of effect for any fire spell. If the caster has made a Spellcraft skill roll to make the fire spell usable underwater, the surface still blocks the spell’s line of effect.

**Floods**

In many wilderness areas, river floods are a common occurrence.

In spring, an enormous snow melt can engorge the streams and rivers it feeds. Other catastrophic events such as massive rainstorms or the destruction of a dam can create floods as well.

During a flood, rivers become wider, deeper, and swifter. Assume that a river rises by 1d6+1 meters during the spring flood, and its width increases by a factor of 1d6×25%. Fords may disappear for days, bridges may be swept away, and even ferries might not be able to manage the crossing of a flooded river. A river in flood makes Swimming skill rolls one category harder (i.e., calm water becomes rough, and rough water becomes stormy). Rivers also become 50% swifter.

Condition	Attack roll	Damage	Movement	Off Balance? <sup>4</sup>
Has a MOV/Hydro attribute	–2	half	normal	No
Successful Swimming roll	–2	half <sup>1</sup>	quarter or half <sup>2</sup>	No
Firm footing <sup>3</sup>	–2	half	half	No
None of the above	–2	half	normal	Yes

1. A creature without a Swimming MOV suffers a –2 penalty to any attempts to Grab or Restrain a target, but deals damage normally when grappling.

2. A successful Swimming skill roll lets a creature move in water with a base Swimming Movement (SMOV) score equal to one-quarter its base MOV. A character may take a “Run” or “Sprint” action while swimming.

3. Creatures have firm footing when walking along the bottom, braced against a ship’s hull, or the like. A creature can only walk along the bottom if it wears or carries enough gear to weigh itself down—at least one tenth the creature’s own weight (e.g., a character that weighs 90 kg requires 9 kg of additional weight).

Creatures flailing about in the water (usually because they failed their Swimming skill rolls) have a hard time fighting effectively. An off-balance creature loses its REF bonus to DEF, and opponents gain a +2 bonus on attacks against it.

## Appendix D: Tables

This section is separated for printing purposes. These tables are pretty handy for character and mecha creation reference. So print out Appendix D and keep these tables separate from the rest of the book.

The character sheet is purely optional of course. The Game Master may have other versions of an Action! System Character sheet that he or she prefers, which better suits the type of campaign.

### Extended MOV Table

M/Turn	Kph	Mph	Example (based on max speeds)	M/Turn	Kph	Mph	Example (based on max speeds)
1	1.2	0.7		95	114	67.1	
2	2.4	1.4	Leisurely walk	100	120	70.6	Max hwy. speed limit (U.S.)
3	3.6	2.1		105	126	74.1	
4	4.8	2.8	Average walking speed	110	132	77.6	
5	6.0	3.5	M113 APC (water speed)	115	138	81.2	
6	7.2	4.2	Brisk walk	120	144	84.7	Economy car (max speed)
7	8.4	4.9	Power-walk	125	150	88.2	Passenger train
8	9.6	5.6	Jog	130	156	91.8	MLB fast-ball pitch
9	10.8	6.4	Running a 9-minute mile	135	162	95.3	
10	12.0	7.1		140	168	98.8	
11	13.2	7.8		145	174	102	
12	14.4	8.5		150	180	106	
13	15.6	9.2		160	192	113	
14	16.8	9.9	Running a 6-minute mile	170	204	120	
15	18.0	10.6		180	216	127	Police patrol car (max speed)
16	19.2	11.3		190	228	134	
17	20.4	12.0	Running a 5-minute mile	200	240	141	Single-engine private plane
18	21.6	12.7		210	252	148	
19	22.8	13.4		220	264	155	Single-engine plane (cruising speed)
20	24.0	14.1		230	276	162	AH64 Apache
21	25.2	14.8		240	288	169	F6F Hellcat cruise (max 380 mph)
22	26.4	15.5	Running a 4-minute mile	250	300	177	CH-47 Chinook
23	27.6	16.2		260	312	184	
24	28.8	16.9		270	324	191	
25	30.0	17.6		280	336	198	Nascar Racing Car
26	31.2	18.4		290	348	205	A6M2 Zero (max 331mph)
27	32.4	19.1		300	360	212	
28	33.6	19.8		320	384	226	
29	34.8	20.5		340	408	240	
30	36.0	21.2		360	432	254	
32	38.4	22.6		380	456	268	
34	40.8	24.0	Attack submarine	400	480	282	
36	43.2	25.4		450	540	318	
38	45.6	26.8		500	600	353	
40	48.0	28.2	Fastest recorded human running	600	720	424	
42	50.4	29.6		700	840	494	C-17 cargo jet, 757 (528 mph)
44	52.8	31.1		800	960	565	B-52
46	55.2	32.5	Trolley/cable-car	900	1,080	635	
48	57.6	33.9	Cruiser (Ticonderoga class)	1000	1,200	706	Sound barrier (approx. 742 mph)
50	60	35.3	Aircraft carrier, Queen Mary	1200	1,440	847	Land speed record
55	66	38.8	Destroyer, Ocean liner, M113 APC	1400	1,680	988	
60	72	42.4		1600	1,920	1,129	
65	78	45.9	M1A1 Abrams, M-2 Bradley AFV	1800	2,160	1,270	F-18 Hornet (1,318 max)
70	84	49.4		2000	2,400	1,412	
75	90	52.9	T-72 tank	2200	2,640	1,553	
80	96	56.5		2400	2,880	1,694	F-15 Eagle (max), Average Missile
85	102	60.0	Highway driving speed				
90	108	63.5					

## Extended STR Table

Score	Drag	Dead Lift	Carry	Damage	MG equiv.	Example of Dead Lift Weight
0	0	0	0	0	0	
.1	20 g	10 g	5 g	1d3 <sup>MS</sup>	.01 STR <sup>MG</sup>	(.352 oz./10.5 grams) Needle, match
.2	.1 kg	50 g	25 g	1d6 <sup>MS</sup>	.02 STR <sup>MG</sup>	(1.76 oz./52.8 grams) Mouse, small bird
.3	.2 kg	.1 kg	50 g	1d6+2 <sup>MS</sup>	.03 STR <sup>MG</sup>	(3.52 oz.) Empty shot glass, paperback novel, rat
.4	.5 kg	.25 kg	125 g	2d6 <sup>MS</sup>	.04 STR <sup>MG</sup>	(.55 lbs./8.8 oz.) A pint of water, small handgun
.5	1 kg	.5 kg	.25 kg	2d6+2 <sup>MS</sup>	.05 STR <sup>MG</sup>	(1.1 lbs.) Large book, cup of water
.6	2 kg	1 kg	.5 kg	3d6 <sup>MS</sup>	.06 STR <sup>MG</sup>	(2.2 lbs.) notebook computer, medium handgun
.7	3 kg	1.5 kg	.75 kg	3d6+2 <sup>MS</sup>	.07 STR <sup>MG</sup>	(3.3 lbs.) Laptop computer
.8	4 kg	2 kg	1 kg	4d6 <sup>MS</sup>	.08 STR <sup>MG</sup>	(4.4 lbs.) Car tire, cat, large handgun
.9	7 kg	3.5 kg	1.75 kg	4d6+2 <sup>MS</sup>	.09 STR <sup>MG</sup>	(7.7 lbs.) M-16A2, book bag
1	10 kg	5 kg	2.5 kg	1d3	.1 STR <sup>MG</sup>	Infant's weight, M1 Garand, shot-put
2	50 kg	25 kg	12.5 kg	1d6	.2 STR <sup>MG</sup>	Child's weight, full suitcase, 27" TV set
3	100 kg	50 kg	25 kg	1d6+2	.3 STR <sup>MG</sup>	Adolescent's weight
4	200 kg	100 kg	50 kg	2d6	.4 STR <sup>MG</sup>	Average man's weight
5	300 kg	150 kg	75 kg	2d6+2	.5 STR <sup>MG</sup>	Football lineman's weight
6	400 kg	200 kg	100 kg	3d6	.6 STR <sup>MG</sup>	Sumo wrestler's weight, GBU-12 (500-lb bomb)
7	500 kg	250 kg	125 kg	3d6+2	.7 STR <sup>MG</sup>	Large black bear, seal, large stag, small boulder
8	600 kg	300 kg	150 kg	4d6	.8 STR <sup>MG</sup>	Grand piano, small nuclear warhead
9	700 kg	350 kg	175 kg	4d6+2	.9 STR <sup>MG</sup>	120mm mortar, large wooden canoe
10	800 kg	400 kg	200 kg	5d6	1 STR (1d3) <sup>MG</sup>	Motorcycle, sailboat, female polar bear
11	1,200 kg	600 kg	300 kg	5d6+2	1.1 STR <sup>MG</sup>	Male polar bear, camel
12	1,600 kg	800 kg	400 kg	6d6	1.2 STR <sup>MG</sup>	Small trailer
13	2,400 kg	1,200 kg	600 kg	6d6+2	1.3 STR <sup>MG</sup>	Economy car
14	3,200 kg	1,600 kg	800 kg	7d6	1.4 STR <sup>MG</sup>	Mid-size pickup, mini-van
15	4,800 kg	2,400 kg	1,200 kg	7d6+2	1.5 STR <sup>MG</sup>	Luxury car, van
16	6,400 kg	3,200 kg	1,600 kg	8d6	1.6 STR <sup>MG</sup>	Truck
17	9,600 kg	4,800 kg	2,400 kg	8d6+2	1.7 STR <sup>MG</sup>	Large ship's anchor
18	12.5 tons	6,400 kg	3,200 kg	9d6	1.8 STR <sup>MG</sup>	Armoured limousine, Lear jet, Tyrannosaurus Rex
19	18.75 tons	9,600 kg	4,800 kg	9d6+2	1.9 STR <sup>MG</sup>	Killer whale (male)
20	25 tons	12.5 tons	6,400 kg	10d6	2 STR (1d6) <sup>MG</sup>	Subway car, male African elephant
21	37.5 tons	18.75 tons	9,600 kg	10d6+2	2.1 STR <sup>MG</sup>	Fighter jet (unloaded), street car
22	50 tons	25 tons	12.5 tons	11d6	2.2 STR <sup>MG</sup>	Fighter jet (loaded), Small rocket
23	75 tons	37.5 tons	18.75 tons	11d6+2	2.3 STR <sup>MG</sup>	Gray/humpback whale, T-54/55 tank
24	100 tons	50 tons	25 tons	12d6	2.4 STR <sup>MG</sup>	M60A1 tank, amphibious assault vehicle
25	150 tons	75 tons	37.5 tons	12d6+2	2.5 STR <sup>MG</sup>	M1A1 tank, reactor fuel container (rail road)
26	200 tons	100 tons	50 tons	13d6	2.6 STR <sup>MG</sup>	757, space shuttle, blue whale, locomotive
27	300 tons	150 tons	75 tons	13d6+2	2.7 STR <sup>MG</sup>	Cargo jet capacity, C-5A Galaxy (empty)
28	400 tons	200 tons	100 tons	14d6	2.8 STR <sup>MG</sup>	767, SRN4 hovercraft
29	600 tons	300 tons	150 tons	14d6+2	2.9 STR <sup>MG</sup>	Galleon, C-5A Galaxy (fully loaded)
30	800 tons	400 tons	200 tons	15d6	3 STR (1d6+2) <sup>MG</sup>	747, trawler
31	1.2 ktons	600 tons	300 tons	15d6+2	3.1 STR <sup>MG</sup>	
32	1.6 kt	800 tons	400 tons	16d6	3.2 STR <sup>MG</sup>	Drilling rig
33	2.4 kt	1.2 ktons	600 tons	16d6+2	3.3 STR <sup>MG</sup>	
34	3.2 kt	1.6 kt	800 tons	17d6	3.4 STR <sup>MG</sup>	Small bridge
35	4.8 kt	2.4 kt	1.2 ktons	17d6+2	3.5 STR <sup>MG</sup>	Hydroelectric generator
36	6.4 kt	3.2 kt	1.6 kt	18d6	3.6 STR <sup>MG</sup>	Destroyer
37	9.6 kt	4.8 kt	2.4 kt	18d6+2	3.7 STR <sup>MG</sup>	Freight train, lighthouse
38	12.5 kt	6.4 kt	3.2 kt	19d6	3.8 STR <sup>MG</sup>	Nuclear submarine
39	18.75 kt	9.6 kt	4.8 kt	19d6+2	3.9 STR <sup>MG</sup>	
40	25 kt	12.5 kt	6.4 kt	20d6	4 STR (2d6) <sup>MG</sup>	Freighter (empty)
41	37.5 kt	18.75 kt	9.6 kt	20d6+2	4.1 STR <sup>MG</sup>	
42	50 kt	25 kt	12.5 kt	21d6	4.2 STR <sup>MG</sup>	Cruiser, freighter (full)
43	75 kt	37.5 kt	18.75 kt	21d6+2	4.3 STR <sup>MG</sup>	Large ocean liner (cruise ship)
44	100 kt	50 kt	25 kt	22d6	4.4 STR <sup>MG</sup>	Battleship
45	150 kt	75 kt	37.5 kt	22d6+2	4.5 STR <sup>MG</sup>	
46	200 kt	100 kt	50 kt	23d6	4.6 STR <sup>MG</sup>	(100,000,000 kg) Large bridge
47	300 kt	150 kt	75 kt	23d6+2	4.7 STR <sup>MG</sup>	
48	400 kt	200 kt	100 kt	24d6	4.8 STR <sup>MG</sup>	
49	600 kt	300 kt	150 kt	24d6+2	4.9 STR <sup>MG</sup>	

Score	Drag	Dead Lift	Carry	Damage	MG equiv.	Example of Dead Lift Weight
50	800 kt	400 kt	200 kt	25d6	5 STR (2d6+2) <sup>MG</sup>	
51	1.2 mt	600 kt	300 kt	25d6+2	5.1 STR <sup>MG</sup>	
52	1.6 mt	800 kt	400 kt	26d6	5.2 STR <sup>MG</sup>	
53	2.4 mtons	1.2 megatons	600 kt	26d6+2	5.3 STR <sup>MG</sup>	(1,200,000,000 kg)
54	3.2 mtons	1.6 mtons	800 kt	27d6	5.4 STR <sup>MG</sup>	
55	4.8 mtons	2.4 mtons	1.2 megatons	27d6+2	5.5 STR <sup>MG</sup>	
56	6.4 mtons	3.2 mtons	1.6 mtons	28d6	5.6 STR <sup>MG</sup>	
57	9.6 mtons	4.8 mtons	2.4 mtons	28d6+2	5.7 STR <sup>MG</sup>	
58	12.5 mtons	6.4 mtons	3.2 mtons	29d6	5.8 STR <sup>MG</sup>	
59	19.2 ktons	9.6 mtons	4.8 mtons	29d6+2	5.9 STR <sup>MG</sup>	
60	25 ktons	12.5 mtons	6.4 mtons	30d6	6 STR (3d6) <sup>MG</sup>	(12,500,000,000 kg)
61	37.5 megatons	19.2 ktons	9.6 mtons	30d6+2	6.1 STR <sup>MG</sup>	
62	50 mtons	25 ktons	12.5 mtons	31d6	6.2 STR <sup>MG</sup>	
63	75 mtons	37.5 megatons	19.2 mtons	31d6+2	6.3 STR <sup>MG</sup>	
64	100 mtons	50 mtons	25 mtons	32d6	6.4 STR <sup>MG</sup>	
65	150 mtons	75 mtons	37.5 mtons	32d6+2	6.5 STR <sup>MG</sup>	
66	200 mtons	100 mtons	50 mtons	33d6	6.6 STR <sup>MG</sup>	(100,000,000,000 kg)
67	300 mtons	150 mtons	75 mtons	33d6+2	6.7 STR <sup>MG</sup>	
68	400 mtons	200 mtons	100 mtons	34d6	6.8 STR <sup>MG</sup>	
69	600 mtons	300 mtons	150 mtons	34d6+2	6.9 STR <sup>MG</sup>	
70	800 mtons	400 mtons	200 mtons	35d6	7 STR (3d6+2) <sup>MG</sup>	
71	1.2 gigatons	600 mtons	300 mtons	35d6+2	7.1 STR <sup>MG</sup>	
72	1.6 gtons	800 mtons	400 mtons	36d6	7.2 STR <sup>MG</sup>	
73	2.4 gtons	1.2 gigatons	600 mtons	36d6+2	7.3 STR <sup>MG</sup>	(1,200,000,000,000 kg)
74	3.2 gtons	1.6 gtons	800 mtons	37d6	7.4 STR <sup>MG</sup>	
75	4.8 gtons	2.4 gtons	1.2 gigatons	37d6+2	7.5 STR <sup>MG</sup>	
76	6.4 gtons	3.2 gtons	1.6 gtons	38d6	7.6 STR <sup>MG</sup>	
77	9.6 gtons	4.8 gtons	2.4 gtons	38d6+2	7.7 STR <sup>MG</sup>	
78	12.5 gtons	6.4 gtons	3.2 gtons	39d6	7.8 STR <sup>MG</sup>	
79	19.2 gtons	9.6 gtons	4.8 gtons	39d6+2	7.9 STR <sup>MG</sup>	
80	25 gtons	12.5 gtons	6.4 gtons	40d6	8 STR (4d6) <sup>MG</sup>	(12,500,000,000,000 kg)
81	37.5 gtons	19.2 gtons	9.6 gtons	40d6+2	8.1 STR <sup>MG</sup>	
82	50 gtons	25 gtons	12.5 gtons	41d6	8.2 STR <sup>MG</sup>	(25,000,000,000,000 kg)
83	75 gtons	37.5 gtons	19.2 gtons	41d6+2	8.3 STR <sup>MG</sup>	
84	100 gtons	50 gtons	25 gtons	42d6	8.4 STR <sup>MG</sup>	
85	150 gtons	75 gtons	37.5 gtons	42d6+2	8.5 STR <sup>MG</sup>	
86	200 gtons	100 gtons	50 gtons	43d6	8.6 STR <sup>MG</sup>	(100,000,000,000,000 kg)
87	300 gtons	150 gtons	75 gtons	43d6+2	8.7 STR <sup>MG</sup>	
88	400 gtons	200 gtons	100 gtons	44d6	8.8 STR <sup>MG</sup>	
89	600 gtons	300 gtons	150 gtons	44d6+2	8.9 STR <sup>MG</sup>	
90	800 gtons	400 gtons	200 gtons	45d6	9 STR (4d6+2) <sup>MG</sup>	(400,000,000,000,000 kg)
91	1.2 teratons	600 gtons	300 gtons	45d6+2	9.1 STR <sup>MG</sup>	
92	1.6 ttons	800 gtons	400 gtons	46d6	9.2 STR <sup>MG</sup>	
93	2.4 ttons	1.2 teratons	600 gtons	46d6+2	9.3 STR <sup>MG</sup>	(1,200,000,000,000,000 kg)
94	3.2 ttons	1.6 ttons	800 gtons	47d6	9.4 STR <sup>MG</sup>	
95	4.8 ttons	2.4 ttons	1.2 teratons	47d6+2	9.5 STR <sup>MG</sup>	
96	6.4 ttons	3.2 ttons	1.6 ttons	48d6	9.6 STR <sup>MG</sup>	
97	9.6 ttons	4.8 ttons	2.4 ttons	48d6+2	9.7 STR <sup>MG</sup>	
98	12.5 ttons	6.4 ttons	3.2 ttons	49d6	9.8 STR <sup>MG</sup>	(6,400,000,000,000,000 kg)
99	20.75 ttons	9.6 ttons	4.8 ttons	49d6+2	9.9 STR <sup>MG</sup>	
100	25 ttons	12.5 ttons	6.4 ttons	50d6	10 STR (5d6) <sup>MG</sup>	(12,500,000,000,000,000 kg)
101	37.5 ttons	20.75 ttons	9.6 ttons	50d6+2	10.1 STR <sup>MG</sup>	
102	50 ttons	25 ttons	12.5 ttons	51d6	10.2 STR <sup>MG</sup>	(25,000,000,000,000,000 kg)
103	75 ttons	37.5 ttons	20.75 ttons	51d6+2	10.3 STR <sup>MG</sup>	
104	100 ttons	50 ttons	25 ttons	52d6	10.4 STR <sup>MG</sup>	
105	150 ttons	75 ttons	37.5 ttons	52d6+2	10.5 STR <sup>MG</sup>	
106	200 ttons	100 ttons	50 ttons	53d6	10.6 STR <sup>MG</sup>	(100,000,000,000,000,000 kg)
107	300 ttons	150 ttons	75 ttons	53d6+2	10.7 STR <sup>MG</sup>	
108	400 ttons	200 ttons	100 ttons	54d6	10.8 STR <sup>MG</sup>	
109	600 ttons	300 ttons	150 ttons	54d6+2	10.9 STR <sup>MG</sup>	
110	800 ttons	400 ttons	200 ttons	55d6	11 STR (5d6+2) <sup>MG</sup>	(400,000,000,000,000,000 kg)
111	1200 ttons	600 gtons	300 ttons	55d6+2	11.1 STR <sup>MG</sup>	
112	1600 ttons	800 ttons	400 ttons	56d6	11.2 STR <sup>MG</sup>	

Score	Drag	Dead Lift	Carry	Damage	MG equiv.	Example of Dead Lift Weight
113	2400 ttons	1200 ttons	600 ttons	56d6+2	11.3 STR <sup>MG</sup>	(1,200,000,000,000,000 kg)
114	3200 ttons	1600 ttons	800 ttons	57d6	11.4 STR <sup>MG</sup>	
115	4800	2400 ttons	1200 ttons	57d6+2	11.5 STR <sup>MG</sup>	
116	6400 ttons	3200 ttons	1600 ttons	58d6	11.6 STR <sup>MG</sup>	
117	9600 ttons	4800 ttons	2400 ttons	58d6+2	11.7 STR <sup>MG</sup>	
118	12500 ttons	6400 ttons	3200 ttons	59d6	11.8 STR <sup>MG</sup>	(6,400,000,000,000,000 kg) the planet Earth
119	19200 ttons	9600 ttons	4800 ttons	59d6+2	11.9 STR <sup>MG</sup>	
120	25000 ttons	12500 ttons	6400 ttons	60d6	12 STR (6d6) <sup>MG</sup>	

## Scaling and Movement

At times you may wish to compare the relative scores of things that are vastly different in size. For example, how does a mouse's STR compare to the STR of an elephant? Is a mouse's LIF worth as much as the elephant's? Are small arms useless against battleships? What scale should we use for aerial combat?

Using these scaling rules, you can easily determine the relative scores of vastly different sized characters or objects.

The three basic scales used in the Core Rules are Micro Scale, Human Scale, and Mega Scale.

Human Scale is the default scale for the Core Rules. This is the scale that most games will use, whether the players realize it or not.

### Annotating Scale

To indicate a score or statistic in Micro Scale, simply write "MS" after it, either in parenthesis or in superscript. To indicate a score or statistic in Mega Scale, simply write "MG" after it, either in parenthesis or in superscript.

For example, STR 5 (MS) or STR 5<sup>MS</sup> indicates a STR of 5 in Micro Scale. STR 5 (MG) or STR 5<sup>MG</sup> indicates a STR of 5 in Mega Scale

### Attributes

Attributes in Human Scale have a value ten times greater than those in Micro Scale, and attributes in Mega Scale have a value ten times greater than those in Human Scale.

### Primary Attributes

In Action! System, it is assumed that all living creatures have the six primary attributes that make up the Body and Mind Attribute Groups. That is, all living things have STR, REF, HLT, PRE, INT and WIL. They may have a score of 0 in one or more of the attributes, but for purposes of describing them, all creatures can be written to include all six attributes.

Of the primary attributes, only STR is scaled. That is, the relative values of all of the other attributes are on the same relative scale, regardless of the size of the creature. An elephant with a REF of 4 is roughly equal to a mouse that also has a REF of 4. The difference between the two comes in terms of their physical size, which is reflected in a DEF bonus for the mouse and a DEF penalty for the elephant (see the Combat Modifiers table in the Core Rules).

Strength (STR): Strength, on the other hand, is handled differently. STR is scaled in multiples of 10. For example, a mouse with a STR score of 5 in Micro Scale would have the equivalent of a STR of .5 in Human Scale. A human with a STR of 5 would have the equivalent of a STR of 50 in Micro Scale or a STR of .5 in Mega Scale. The Extended STR Table provides information for STR values ranging from .1 (1<sup>MS</sup>) to 120 (12<sup>MG</sup>).

### Derived Attributes

Like primary attributes, all living creatures are assumed to have all of the basic Derived Attributes presented in the Core Rules—Defensive Target Number (DEF), Initiative (INI), Toughness (TGH), Life (LIF), and Move (MOV). Of these, TGH and LIF are the only attributes that are affected by scaling.

**Defensive Target Number (DEF):** Differences between the DEF scores of creatures of different scales is handled by applying the DEF Modifier to each creature, based on its size (see Combat Modifiers).

**Initiative (INI):** Initiative remains the same.

**Toughness (TGH):** Toughness (TGH) may be scaled as for attributes. When calculating the TGH of a creature that has Mega Scale STR, convert the STR score to Human Scale and then calculate the TGH score normally. The resulting TGH score is still measured in Human Scale, however. GMs wishing to use a simplified Mega Scale TGH can simply divide the score by 10.

Creatures with Micro Scale STR should calculate their TGH as follows: (STR<sup>MS</sup> + WIL) /2. The resulting TGH score is measured in Micro Scale. GMs wishing to convert it to Human Scale TGH can simply divide the score by 10. In most cases the result will be less than 1. We recommend that you allow even Micro Scale characters a minimum Human Scale TGH score of 1; even Micro Scale characters are supposed to be heroes, after all.

**Life (LIF):** Because LIF is derived from HLT and WIL, which are not themselves affected by scaling, a character's LIF score should be scaled. Each step up in scale represents a tenfold decrease in the relative value of the attribute, rounding up. For example, a mouse with a LIF score of 25 in Micro Scale would have the equivalent of a LIF of 3 (2.5 rounded up) in Human Scale. A human with a LIF of 30 would have the equivalent of a LIF of 300 in Micro Scale or a LIF of 3 in Mega Scale.

**Move (MOV):** This is perhaps the trickiest of attributes to deal with when it comes to scaling. Rather than assigning a straight conversion rule, we recommend using whichever scale is most convenient and dividing the score by the appropriate number. For example, in Human Scale, each hex on a map might represent 1 meter (the default measurement for a 1-inch scale map when using 25mm or 28mm figures). If you decide that during a scene in which the characters are participating in an aerial dogfight that each hex represents 100 meters, then you would simply divide the Human Scale MOV score by 100. So a human (let's say a superhero who can fly) with a flying MOV of 200 would have a scaled MOV of 2. Likewise, if in the same dogfight you decided that each hex on the map represents 200 meters, then an F-18 Hornet, which has a MOV of 1,800 in Human Scale, would have a scaled MOV of 9 when moving on the hex mat for

the dogfight. For the default (Human Scale) MOV values for various sample vehicles, see the Extended MOV Table below.

### **Skills**

Skill scores are not scaled. A skill level of 4 for a Human Scale character has the same value as a skill level of 4 for a Mega Scale character.

### **Damage**

Scaling damage is very simple. When converting randomly determined damage (i.e., when rolling damage dice), every 10 points of Micro Scale damage equals 1 point of Human Scale damage. Every 10 points of Human Scale damage equals 1 point of Mega Scale damage.

Be sure to apply damage to any TGH on the same scale. For example, if a tiny mouse robot does 27 points of Micro Scale blunt damage to a human, be sure to convert that damage to Human Scale or convert the human's TGH to Micro Scale before subtracting the TGH from the damage.

### **Armour**

All Armour Values for armour are given in Human Scale unless noted otherwise. Always convert armour to the same level as the damage that is applied to it, or vice versa.

Our tiny mouse robot has 35 LIF<sup>MS</sup> (he's a stout little mouse!) and tree bark armour that affords him AV 10<sup>MS</sup>. But our brave mouse robot has just been bitten by a dog for 4 points of Human Scale damage! The bite is converted to Micro Scale damage ( $4 \times 10 = 40$  points!) and then the AV is subtracted from the damage. Our hero has taken  $40 - 10 = 30$  points of damage! Luckily he still has 5 LIF remaining, and an Action Point or two...

## Character Sheet

Character Name: \_\_\_\_\_  
 Player Name: \_\_\_\_\_  
 Campaign: \_\_\_\_\_  
 GM's name: \_\_\_\_\_  
 Reality/power level: Cinematic

### Attributes

	Score	Roll	Notes
STR	_____	+3d6	Dmg: _____ Lift: _____
REF	_____	+3d6	
HLT	_____	+3d6	
PRE	_____	+3d6	<b>Persuasion:</b> + _____
INT	_____	+3d6	<b>Awareness:</b> + _____
WIL	_____	+3d6	

### Derived Attributes

<b>DEF</b> _____	<i>REF</i> + 10	<b>Armour mod:</b> _____ <b>Other mod:</b> _____
<b>INI</b> _____	( <i>REF</i> + <i>INT</i> )/2	<b>INI Bonus:</b> _____ (for _____)
<b>TGH</b> _____	( <i>STR</i> + <i>WIL</i> )/2	<b>Stunned</b> ( <i>LIF</i> /2): _____
<b>LIF</b> _____	( <i>HLT</i> x3)+( <i>WIL</i> x2)	<b>Superficial</b> ( <i>HLT</i> x1): _____ <b>Light</b> ( <i>HLT</i> x2): _____
<b>MOV</b> _____	<i>REF</i> +( <i>STR</i> + <i>HLT</i> )/2	<b>Serious</b> ( <i>HLT</i> x3): _____ <b>Critical</b> ( <i>HLT</i> x4): _____
<b>SOC</b> _____	( <i>WIL</i> x 10) + <i>PRE</i>	<b>Run</b> ( <i>MOV</i> x2): _____ <b>Sprint</b> ( <i>MOV</i> x3): _____ Option: Starting SAN is reduced by 5 points for each Psych Disad possessed at Hardship 10 points for each one possessed at Peril level.

### Advantages

[illegible]

### Disadvantages

[illegible]

### Armour Worn / Hit Locations

Armour	Location	Roll	Damage	Mod	AV
	Neck	2	1½x damage	-6	
	Hand	3	½ damage	-3	
	Shoulder	4-5	½ damage	-2	
	Arm	6	½ damage	-2	
	Chest/torso	7-10		-1	
	Stomach (lower back)	11-13		-4	
	Vital organ	14	1½x damage	-6	
	Thigh	15-16	½ damage	-2	
	Calf/lower leg	17	½ damage	-4	
	Foot	18	¼ damage**	-3	
	Head	19	2x damage	-4	

*Note: Adjust damage after subtracting AV for armour.*

### Universal Skills

Cost	Skill/Group	Score*	Roll
_____	Area Knowledge ( _____ )	_____	+
_____	Awareness	_____	+
_____	Climbing	_____	+
_____	Instruction	_____	+
_____	Maces/Clubs	_____	+
_____	Persuasion	_____	+
_____	Professional ( _____ )	_____	+
_____	Society ( _____ )	_____	+
_____	Stealth	_____	+
_____	Throwing	_____	+
_____	Unarmed combat (Brawling)	_____	+

\* *Universal Skills* start with a score of 2 at no cost.

### Additional Skills

[illegible]

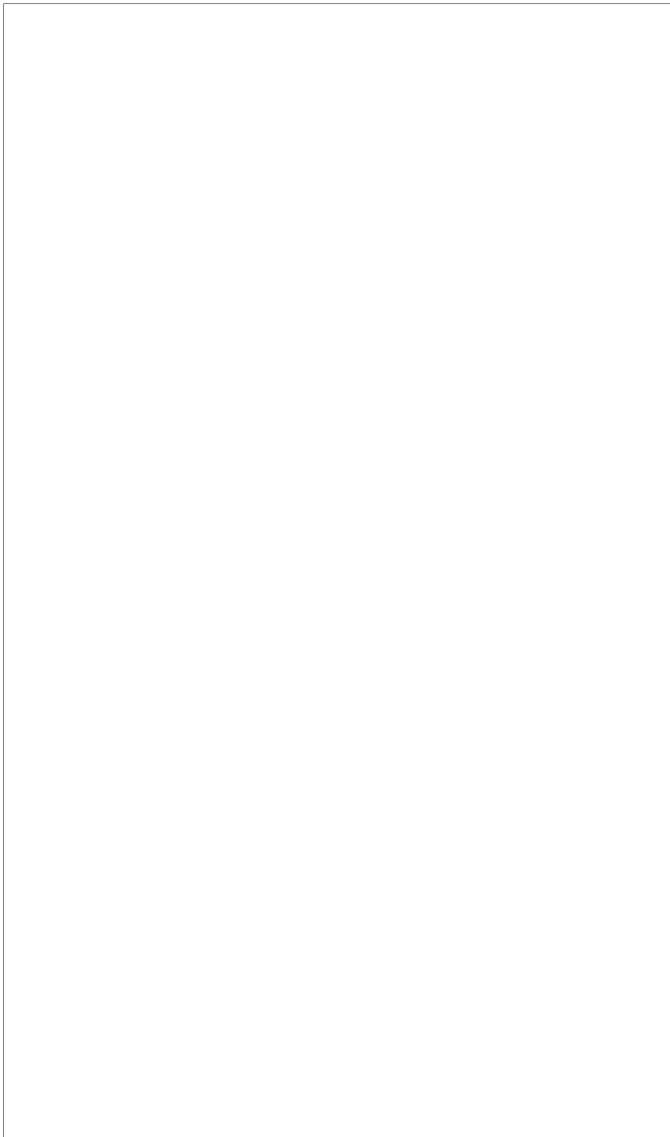
## Attacks/Weapons

Attack / Weapon	SIZ	STR	Dmg	Skill Score
Punch	S	N/A	_____	B/S + _____
Kick	S	N/A	_____	B/S + _____
_____	_____	_____	_____	/ + _____
_____	_____	_____	_____	/ + _____
_____	_____	_____	_____	/ + _____
_____	_____	_____	_____	/ + _____

## Damage Tracker

☐ 0      ☐ 5      ☐ 10      ☐ 15      ☐ 20      ☐ 25  
☐ 30      ☐ 35      ☐ 40      ☐ 45      ☐ 50  
☒ **Stunning Damage**      ☒ **Lethal Damage**



**Character Illustration****Description (make up details)**

Appearance \_\_\_\_\_

Personality \_\_\_\_\_

Likes/dislikes \_\_\_\_\_

Quote \_\_\_\_\_

Hobbies \_\_\_\_\_

Goals \_\_\_\_\_

**Background (make up details or base on TRAITS)**

Relatives \_\_\_\_\_

\_\_\_\_\_

Friends \_\_\_\_\_

\_\_\_\_\_

Enemies/Rivals \_\_\_\_\_

Employer: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Contacts/Co-workers: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Equipment / Items carried**

Item/Notes	Wt.
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Important Events (in character's life or in game)**

Date/when	Event/Notes
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Notes / Miscellaneous**

# Core Glossary

This glossary includes expanded terms for Assembler Core and omits Action! System Core Rules terms not used. This glossary also shows which sections are extensions and variants of the A!SCR.

**Abilities:** see Traits

**ability roll:** similar to a skill roll or attribute roll. An Ability Roll is made by adding the Power Level plus the Governing Attribute score (if applicable), plus the result of a dice roll (Power Level + 3d6 + Attribute if applicable), and comparing the total to a Target Number (TN). If the total of the Ability Roll equals or exceeds the TN, the task is successful.

**Action Point:** (Abbr. "AP") A special point used by characters to achieve particularly difficult tasks. One Action Point allows a player to add +5 to the dice roll. Action Points may be used after the dice have been rolled. Assembler Core has extended options for Action points beyond the A!SCR description.

**adv:** Advantage

**adventure:** A fictional story or adventure that the players participate in. An Adventure can last one, or even several, Game Sessions.

**Amateur:** A rating of 2 in a skill. Characters who have a skill level of 2 are "amateurs" where that skill is concerned. Characters receive all Universal Skills at this level at no cost, though they may be increased by spending Character Points (during character creation) or Experience Points.

**amm:** Ammunition capacity

**ammunition capacity:** (Abbr. "amm") the number of rounds of ammunition contained in a ranged weapon or in an attached supply, such as a battery or magazine. Simple missile weapons have an Amm. rating of 1 because they can't "hold ammo."

**AP:** Action point.

**aptitude attribute:** One of three Attributes within an Attribute Group; the Attribute governing finesse, skill, manipulation or aptitude (e.g., Reflexes in the Body group; Intellect in the Mind Group).

**Armour value:** (Abbr. "AV") A number representing the reduction of damage due to protective covering. The number is subtracted from the damage rolled following a successful attack on the character.

**attack roll:** A skill roll made to determine whether an attack is successful. The attacking character adds his applicable attribute score + skill score + 3d6. The attack hits if the attacker's total is equal to or exceeds the target's DEF + any modifiers.

**attribute group:** A category of attributes denoting a particular "aspect" of a character (e.g., the Body and Mind groups in the Core Rules). Each Attribute Group contains three Attributes: a Power Attribute, an Aptitude Attribute and a Resistance Attribute (e.g., Strength, Reflexes and Health in the Body group).

**attribute roll:** A check of the appropriate attribute + a die roll vs. a TN. This is a variant to the Action! System Core Rules discussed on the Action! System forums.

**attribute:** An aspect of a character's innate ability, with a rating from 1 to 10 (human range); added to a character's Skill score and a random element to determine success or failure at a task.

**AV:** Armour Value.

**Benefits:** Similar to A!SCR's Advantages except point balanced with the rest of Assembler Core. Benefits are broken up into Social and Physical Benefits.

**character point:** (Abbr. "CP") A unit of value used by the player to purchase traits and skills for their character.

**character:** A fictional persona portrayed in a game.

**Cinematic:** The middle of three "power levels" of a game, designed to simulate heroic, cinematic-style adventure games and settings with larger-than-life heroes.

**Clueless:** A rating of 0 in a skill. Characters who have a skill level of 0 are "clueless" where that skill is concerned. All skills are rated 0 until the Player uses his Character Points or Experience Points to purchase at least 1 level in that skill.

**common skill:** A skill possessed by all characters in a given genre or setting. All characters receive common skills at a level of +2 at no cost.

**Competent:** A rating of 4 in a skill. Characters who have a

skill level of 4 are "competent" where that skill is concerned. The character possesses a good grasp on the details and theories of his chosen field or is capable of performing the action on his own without supervision. This is the default level for professionals in a given field.

**Complication:** Like the A!SCR's Disadvantages except point balanced with the rest of Assembler Core.

**core attribute:** One of 6 attributes listed in the core rules.

**core rules:** The basic, "core" rules of the game system; the foundation for all games using the game system. Some core rules may be enhanced by the use of Extensions, or even replaced by Variants.

**CP:** Character point.

**DEF:** Defensive target number

**defensive target number:** (Abbr. "DEF") The basic Target Number required for opponents to hit a character in combat. A characters' base DEF equals 10 + REF.

**derived attribute:** An attribute whose score is derived from one or more attributes. Derived Attributes are not always rated 1-to-10 as Attributes are; Derived Attribute scores may exceed 10, or even 100.

**difficulty level:** (Abbr. "DL") One of 7 levels of difficulty for tasks: Average, Tricky, Challenging, Difficult, Demanding, Extreme and Legendary. Each Difficulty Level has an associated Target Number.

**difficulty modifier:** (Abbr. "DM") A variable or condition in the game that makes a task either more or less difficult. Difficulty Modifiers are expressed as a bonus (a reduction of the DL) or penalty (raising the DL). For example, a Difficult task with a +1DL modifier (a penalty) becomes a Demanding task, whereas a Difficult task with a -1DL modifier (a bonus) becomes a Challenging task.

**DL:** Difficulty level

**DM:** Difficulty modifier.

**dmg:** Damage.

**effect number:** The number by which a skill or attribute roll exceeds the Target Number (i.e., Skill Roll - TN = EN).

**EN:** Effect number

**entangled:** Entanglement impedes movement, but does not entirely prevent it unless the bonds are anchored to an immobile object or tethered by an opposing force. An entangled character cannot Run or Sprint, and suffers a -2 penalty to attack rolls and a -4 penalty to its effective Reflexes (REF) score.

**exhausted:** Tired to the point of significant impairment. A fatigued character becomes exhausted by doing something else that would normally cause fatigue. An exhausted character cannot move faster than his base MOV in meters per turn (i.e., cannot Run or Sprint) and suffers an effective -4 penalty to the character's Strength and Reflexes attributes.

**experience point:** (Abbr. "EP") A unit of value awarded to players at the end of an Adventure to improve their character.

**Experienced:** A rating of 5 in a skill. Characters who have a skill level of 5 are "experienced" where that skill is concerned. The character is well qualified and informed in his chosen field.

**Expert:** A rating of 7 in a skill. Characters who have a skill level of 7 are "experts" where that skill is concerned. The character has become an authority in his chosen field or skill, having honed his skills to perfection after continuous practice and use. Without regular training and active use, it is nigh impossible for a character to exceed a score of 7 in most skills.

**extension:** An optional rule or game element that adds to an existing rule or element. For example: new Derived Attributes (adds new attributes), Hit Location rules (adds option to combat). Examples of which are the super powers, skill descriptions and sample weapons lists.

**Extreme:** The highest of three "power levels" of games, designed to simulate superheroic, comic book or animé-style adventure games and settings with supernatural heroes.

**fatigued:** Tired to the point of impairment. A fatigued

character can neither Run nor Sprint and suffers an effective effective -2 penalty to the character's Strength and Reflexes attributes.

**game master:** (Abbr. "GM") The moderator or "referee" of an Adventure or game session, and the player who portrays all of the NPCs in the game. The GM may also be called by a different name, depending on the game setting or genre, such as the "Storyteller" or "Moderator," but he is still the GM for purposes of interpreting and enforcing the rules of play and moderating the game.

**game session:** A single gathering of players to participate in one or more Adventures. When the players leave, the session is completed. A Game Session can last for 30 minutes or several hours, or longer.

**Genius:** A rating of 9 in a skill. Characters who have a skill level of 9 are "geniuses" where that skill is concerned. The character has risen to a level where he is using his great mental capacity, physical prowess, and inventive ability to make unique breakthroughs in his field, creating his own original styles and theories and setting new standards. Examples include a Nobel Prize winning scientist).

**GM:** See Game Master

**governing attribute:** An Attribute whose score is combined with a Skill level for a specific Skill Roll (Attribute + Skill + 3d6).

**health:** (Abbr. "HLT") One of the six primary attributes; the resistance attribute in the Body Attribute Group.

**HLT:** Health. Vehicles also use this attribute as Hazardous Load Tolerances.

**INI:** Initiative.

**Init:** Initiative Modifier.

**Initiative modifier:** (abbreviated "Init") applied as a temporary modifier to the INI score of the character using the weapon. The Initiative Modifier may be a positive number (e.g., +1), a negative number (e.g., -1), or zero.

**Initiative:** a derived attribute indicating when a character may act in a turn;  $INI = (REF + INT)/2$ .

**INT:** Intellect; one of the six core attributes; the aptitude attribute in the Mind Attribute Group.

**intellect:** (Abbr. "INT") One of the six core attributes; the aptitude attribute in the Mind Attribute Group.

**irresistible damage:** a type of attack that totally circumvents the character's TGH or natural A.V and directly affects the LIF attribute.

**Legendary:** A rating of 10 in a skill. Characters who have a skill level of 10 are of "legendary" ability where that skill is concerned. The character has achieved the most rare and highest level of skill or knowledge possible, becoming a revolutionary figure in his field. He has become so talented that he inspires wonder, and is capable of creating, theorizing or performing any most related action with minimum effort. This is the maximum score any normal human may attain in a skill without supernatural or technological aid.

**LIF:** Life points

**life points:** (Abbr. "LIF") A derived attribute representing the amount of damage a character can sustain before being rendered incapacitated (unconscious if from stun damage, dying if from lethal damage).

**master quality:** Exceptionally well-made, generally adding +1 to attack rolls (if the item is a weapon), adding +1 the AV (if the item is Armour), or adding +3 to relevant skill rolls (if the item is a tool).

**Max:** Maximum effective range (e.g., of a weapon or vehicle).

**Master:** A rating of 8 in a skill. Characters who have a skill level of 8 are "masters" where that skill is concerned. The character has excelled in his field, surpassing others of lesser dedication to become superior in quality, skill or achievement. There is very little the character does not know about the area or topic covered by the skill.

**Maximum effective range:** the maximum distance at which a ranged weapon can reasonably hit a target at which it is aimed.

**mega scale:** (Abbr. "MG") Scale used for large items or massive characteristics (e.g., Mega Scale STR, Mega Scale damage). Annotated as "(MG)" or as "MG" in superscript following the statistic name (e.g., "STR (MG) 4" or "STR<sup>MG</sup> 4").

**MG:** Mega scale

**micro scale:** (Abbr. "MS") Scale used for very small items or characteristics (e.g., Micro Scale STR, Micro Scale damage). Annotated as "(MS)" or as "MS" in superscript following the statistic name (e.g., "LIF (MS) 4" or "LIF<sup>MS</sup> 4").

**modifier:** A variable or condition in the game that makes a task either more or less difficult. Modifiers may add a bonus or impose a penalty to a skill roll or cause an increase or decrease in the Target Number of a skill roll.

**MOV:** Movement

**movement:** (Abbr. "MOV") A derived attribute indicating the number of meters a character can move in one turn.

**MS:** Micro scale

**non-player character:** (abbr. "NPC") A fictional persona portrayed by the GM in an Adventure or story.

**Novice:** A rating of 1 in a skill. Characters who have a skill level of 1 are "novices" where that skill is concerned. The character is familiar with the field, having done moderate reading on the subject or watched the skill being performed by others, but has no actual hands-on experience of any significance. The character is new to the particular field or activity, essentially an apprentice or beginner (e.g., a hobby, a police academy recruit, a soldier in boot camp).

**NPC:** Non-player character

**Physical Benefits:** see Benefits. Can be copied by mimicking abilities.

**PC:** Player Character

**player character:** (abbr. "PC") A fictional persona portrayed by a player in a game.

**player:** A real person who plays/participates in a game.

**power attribute:** One of three Attributes within an Attribute Group; the Attribute governing strength, force, or general power (e.g., Strength in the Body group; Presence in the Mind group).

**power group:** similar mechanics to the Skill Group with powers bought cheaply if their special effects are based on the power group's theme.

**power level:** a measure of the power the character possesses in a super ability. Power levels are useful for comparing neutralizing powers and opposing powers.

**Powers:** see Traits

**PRE:** Presence.

**Presence:** (Abbr. "PRE") One of the six core attributes; the strength attribute in the Mind Attribute Group.

**prone:** Lying on the ground. An attacker who is prone has a -2 penalty to skill rolls for melee attacks (but not for ranged attacks). Skill rolls for melee attacks against a prone defender have a +1 bonus, and skill rolls for ranged attacks against a prone character have a -2 penalty.

**Psy. Adv.:** Psychological advantage

**Psy. Disad:** Psychological disadvantage

**range modifier:** (Abbr. "Rmod") a bonus usable only to offset or cancel negative modifiers due to range.

**range increment:** useful in resolving some power mechanics and game situations, the range increment is a tenth of the maximum range in meters or feet. A weapon with a MAX of 500m has ten increments of 5 meters.

**rate of fire:** (Abbr. "RoF") The maximum number of rounds that may be fired from a weapon in a single turn. A fraction indicates the number of turns required to reload the weapon between shots (e.g., "1/3" means the weapon can be fired once every three turns). More than one number separated by a colon indicates the weapon is capable of multiple rates of fire (e.g., 3: 20 indicates the weapon is capable of firing either 3 shots per turn or 20 shots per turn). In such cases the player selects which rate of fire to use at the beginning of his character's action.

**Realistic:** The lowest of three "power levels," designed to simulate gritty, realistic-style adventure games and settings with "normal" heroes.

**REF:** Reflexes. Vehicles also use this attribute to demonstrate its manoeuvrability.

**Reflexes:** (Abbr. "REF") One of the six core attributes; the aptitude attribute in the Body Attribute Group.

**resistance attribute:** One of three Attributes within an Attribute Group; the Attribute governing stamina, will, or general resistance to outside effect or influence (e.g., Health in the Body group; Willpower in the Mind group).

**RMod:** Range modifier.  
**RoF:** Rate of fire.  
**Running Speed:** twice the base MOV  
**session:** game session  
**skill group:** A general category of Skills; may be used as Skills in games using simplified rules.  
**skill roll:** A method of determining success or failure at a task. A Skill Roll is made by adding the Skill Score plus the Governing Attribute score, plus the result of a dice roll (Attribute + Skill + 3d6), and comparing the total to a Target Number (TN). If the total of the Skill Roll equals or exceeds the TN, the task is successful.  
**skill score:** A numeric rating, from 1 to 10, denoting a Character's overall level of competency, knowledge or proficiency in a given Skill. A character's Skill Score is added to the governing Attribute score and a random element to determine success or failure at a task (see Skill Roll).  
**skill:** An area of training, expertise or education; a Character's skill score is added to the governing Attribute score plus 3d6 to determine success or failure at a task (Attribute + Skill + 3d6).  
**SOC:** Society derived attribute.  
**Social Benefits:** see Benefits. May be copied by Disguising abilities.  
**Society:** (Abbr. "SOC") A derived attribute which allows the player to measure the character's Fame and Reputation. A new derived attribute for Assembler Core.  
**Specialist:** A rating of 6 in a skill. Characters who have a skill level of 6 are "specialists" where that skill is concerned. The character has become highly trained or informed in his chosen field or skill to the point he practices his skills on a regular or daily basis.  
**Sprint Speed:** three times the base MOV.  
**STR Min:** Strength Minimum.  
**STR:** Strength  
**strength:** (Abbr. "STR") one of the six primary attributes; the power attribute in the Body Attribute Group.  
**strength minimum:** (Abbr. "STR Min.") The minimum STR score required to wield a weapon effectively or to wear armour without penalty due to encumbrance.  
**stunned:** Unable to perform an action. A stunned character can take no actions and does not receive the REF bonus to his DEF (i.e., has a base DEF of 10). In addition, a stunned character immediately drops anything he or she is holding.  
**subdual damage:** Non-lethal damage typically resulting from

an unarmed attack, an armed attack delivered with intent to subdue, a forced march, or a debilitating condition such as heat or starvation.

**Supernatural:** Beyond the unaided ability of a normal human being; A rating of 11 or higher in a skill or attribute. Characters who have a skill level of 11 or higher are of "legendary" ability.

**Superpower:** see Traits

**target number:** (Abbr. "TN") The number used to determine success or failure with a Skill Roll.

**TGH:** Toughness

**TN:** Target number

**toughness:** (Abbr. "TGH") A derived attribute indicating the amount of stunning damage a character may ignore from an attack. A character's starting TGH = (STR + WIL)/2, rounding up.

**Trained:** A rating of 3 in a skill. Characters who have a skill level of 3 are "trained" where that skill is concerned. The character has a general, working understanding of that field, having received instruction from someone of Experienced level (a skill level of 5) or higher.

**Traits:** A special talent, ability or condition possessed by a Character. The AISCR has Traits which may be Innate or Developed, as well as an Advantage or Disadvantage. Traits are grouped into categories: Intellectual, Psychological, Physical, and Social. Assembler Core has an extension which includes Complications and Benefits which are point balanced with the PowASmble extension. GMs should use one set of traits or attempt to point balance both for expanded choices.

**turn:** One phase during combat, lasting 3 seconds of "game time."

**universal skill:** A skill possessed by all characters, regardless of genre or setting. Characters receive universal skills at a level of +2 at no cost.

**Variant:** An optional rule or game element that replaces another, existing rule or element. For example: a new task resolution method (e.g., using 2d10 instead of 3d6 to resolve Skill Rolls), or a modified skill list for a specific genre (replaces the "generic" skill list in the core rules). The Assembler Core poison rules are slight variants to the Poisons and Drugs Extension.

**villain:** An antagonist, usually a major or important Non-player Character, portrayed by the GM in an Adventure or story.

**weight:** (Abbr. "wt.") the weight of an item, listed in kilograms (kg).

**WIL:** Willpower or Will

**Will:** (Abbr. "WIL") One of the six core attributes; the resistance attribute in the Mind Attribute Group.

**wt:** Weight

## Legal Information

### Open Game Content Declaration

This publication is designated as Open Game Content and is licensed for public use under the terms of the Open Game License v1.0.

### Product Identity Declaration

The terms below are reserved terms and Product Identity. Don't go using these terms in another body of work without the permission of the Author as shown below in the Section 15 Copyright notice.

**MechASsemble!** and it's derivatives.

**CharactASsemble!** and it's derivatives.

**ASsembler! Core** is designated as Product Identity.

### Open Game License Version 1.0a

- The following text is the property of Wizards of the Coast, Inc. and is Copyright 2000 Wizards of the Coast, Inc ("Wizards"). All Rights Reserved.
- Definitions: (a)"Contributors" means the copyright and/or trademark owners who have contributed Open Game Content; (b)"Derivative Material" means copyrighted material including derivative works and translations (including into other computer languages), potation, modification, correction, addition, extension, upgrade, improvement, compilation, abridgement or other form in which an existing work may be recast, transformed or adapted; (c) "Distribute" means to reproduce, license, rent, lease, sell, broadcast, publicly display, transmit or otherwise distribute; (d)"Open Game Content" means the game mechanic and includes the methods, procedures, processes and routines to the extent such content does not embody the Product Identity and is an enhancement over the prior art and any additional content clearly identified as Open Game Content by the Contributor, and means any work covered by this License, including translations and derivative works under copyright law, but specifically excludes Product Identity. (e) "Product Identity" means product and product line names, logos and

identifying marks including trade dress; artifacts; creatures characters; stories, storylines, plots, thematic elements, dialogue, incidents, language, artwork, symbols, designs, depictions, likenesses, formats, poses, concepts, themes and graphic, photographic and other visual or audio representations; names and descriptions of characters, spells, enchantments, personalities, teams, personas, likenesses and special abilities; places, locations, environments, creatures, equipment, magical or supernatural abilities or effects, logos, symbols, or graphic designs; and any other trademark or registered trademark clearly identified as Product identity by the owner of the Product Identity, and which specifically excludes the Open Game Content; (f) "Trademark" means the logos, names, mark, sign, motto, designs that are used by a Contributor to identify itself or its products or the associated products contributed to the Open Game License by the Contributor (g) "Use", "Used" or "Using" means to use, Distribute, copy, edit, format, modify, translate and otherwise create Derivative Material of Open Game Content. (h) "You" or "Your" means the licensee in terms of this agreement.

3. The License: This License applies to any Open Game Content that contains a notice indicating that the Open Game Content may only be Used under and in terms of this License. You must affix such a notice to any Open Game Content that you Use. No terms may be added to or subtracted from this License except as described by the License itself. No other terms or conditions may be applied to any Open Game Content distributed using this License.
4. Offer and Acceptance: By Using the Open Game Content You indicate Your acceptance of the terms of this License.
5. Grant and Consideration: In consideration for agreeing to use this License, the Contributors grant You a perpetual, worldwide, royalty-free, non-exclusive license with the exact terms of this License to Use, the Open Game Content.
6. Representation of Authority to Contribute: If You are contributing original material as Open Game Content, You represent that Your Contributions are Your original creation and/or You have sufficient rights to grant the rights conveyed by this License.
7. Notice of License Copyright: You must update the COPYRIGHT NOTICE portion of this License to include the exact text of the COPYRIGHT NOTICE of any Open Game Content You are copying, modifying or distributing, and You must add the title, the copyright date, and the copyright holder's name to the COPYRIGHT NOTICE of any original Open Game Content you Distribute.
8. Use of Product Identity: You agree not to Use any Product Identity, including as an indication as to compatibility, except as expressly licensed in another, independent Agreement with the owner of each element of that Product Identity. You agree not to indicate compatibility or co-adaptability with any Trademark or Registered Trademark in conjunction with a work containing Open Game Content except as expressly licensed in another, independent Agreement with the owner of such Trademark or Registered Trademark. The use of any Product Identity in Open Game Content does not constitute a challenge to the ownership of that Product Identity. The owner of any Product Identity used in Open Game Content shall retain all rights, title and interest in and to that Product Identity.
9. Identification: If you distribute Open Game Content You must clearly indicate which portions of the work that you are distributing are Open Game Content.
10. Updating the License: Wizards or its designated Agents may publish updated versions of this License. You may use any authorized version of this License to copy, modify and distribute any Open Game Content originally distributed under any version of this License.
11. Copy of this License: You MUST include a copy of this License with every copy of the Open Game Content You Distribute.
12. Use of Contributor Credits: You may not market or advertise the Open Game Content using the name of any Contributor unless You have written permission from the Contributor to do so.
13. Inability to Comply: If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Open Game Content due to statute, judicial order, or governmental regulation then You may not Use any Open Game Material so affected.
14. Termination: This License will terminate automatically if You fail to comply with all terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses shall survive the termination of this License.
15. Reformation: If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

## **Section 15. Copyright Notice**

Open Game License v 1.0a Copyright 2000, Wizards of the Coast, Inc.

System Reference Document Copyright 2000-2003, Wizards of the Coast, Inc.; Authors Jonathan Tweet, Monte Cook, Skip Williams, Rich Baker, Andy Collins, David Noonan, Rich Redman, Bruce R. Cordell, based on original material by E. Gary Gygax and Dave Arneson.

Modern System Reference Document Copyright 2002-2004, Wizards of the Coast, Inc.; Authors Bill Slavicsek, Jeff Grubb, Rich Redman, Charles Ryan, Eric Cagle, David Noonan, Stan!, Christopher Perkins, Rodney Thompson, and JD Wiker, based on material by Jonathan Tweet, Monte Cook, Skip Williams, Richard Baker, Peter Adkison, Bruce R. Cordell, John Tynes, Andy Collins, and JD Wiker.

Dragonstar: Starfarer's Handbook, Copyright 2001, Fantasy Flight Publishing, Inc.

Traps & Treachery Copyright 2001, Fantasy Flight Publishing, Inc.

Deadlands D20 Copyright © 2001 by Pinnacle Entertainment Group.

Sidewinder: Wild West Adventure Copyright © 2002 by Citizen Games.

Silver Age Sentinels d20 Copyright 2002, Guardians Of Order, Inc.; Authors Stephen Kenson, Mark C. MacKinnon, Jeff Mackintosh, Jesse Scoble.

BESM d20 Revised Copyright 2003, Guardians of Order, Inc.; Author Mark C. MacKinnon, Ian Sturrock.

d20 Mecha Copyright 2003, Guardians Of Order, Inc.; Author David L. Pulver.

Mecha SRD Extreme Appendix 2 Copyright 2003, Philip Reed. Published by Ronin Arts, [www.roninarts.com](http://www.roninarts.com)

Blood and Fists Copyright 2003, RPGObjects; Author Charles Rice

Action! System Core Rules version 1.1 copyright 2003 by Gold Rush Games; Authors Mark Arsenault, Patrick Sweeney, Jon Winn.

Gunslingers: Wild West Action! Copyright 2003 by Gold Rush Games. Author Mark Arsenault.

Poisons and Drugs Extension copyright 2003 by Gold Rush Games. Author Mark Arsenault.

Instant Action! Quick Play Rules version 1.0 copyright 2003 by Gold Rush Games; Author Mark Arsenault

Scaling Extension copyright 2003 by Gold Rush Games. Author Mark Arsenault.

Hit Locations Extension copyright © 2003 by Gold Rush Games. Author Mark Arsenault.

Extended Strength Table Extension copyright 2003 by Gold Rush Games. Author Mark Arsenault.

Extended Distance Modifiers Extension copyright © 2003 by Gold Rush Games. Author Mark Arsenault.

Optional Skills Lists Variant copyright © 2003 by Gold Rush Games. Author Mark Arsenault.

Alternate Dice Mechanics: 1d20 & 2d10 Extension copyright © 2003 by Gold Rush Games. Author Mark Arsenault.

Instruction and Study Extension copyright © 2003 by Gold Rush Games. Author Mark Arsenault.

Sanity Extension copyright 2003 by Gold Rush Games. Author Mark Arsenault.

A Hostile World Extension copyright © 2003 by Gold Rush Games.

Action! System Core Rules version 1.1 (U.K. English Edition) copyright 2003 by Gold Rush Games; Translation and editing by Phil Brennán

Luftwaffe 1946 Role Playing Game Copyright 2003 by Battlefield Press, Inc.; Author Jonathan M. Thompson

Horizon: Redline Copyright 2003, Fantasy Flight Publishing, Inc.

Horizon: Mechamorphosis Copyright 2004, Fantasy Flight Publishing, Inc.

Assembler Core! copyright © 2007 by Jamie Borg