

Tech 1 (Foundations of Tech Pt I)
Assignments and Lecture Information

Project 3 – *Transportation (Model Rockets)*

Terms (Define)

1. Force
2. Weight
3. Thrust
4. Aerodynamics
5. Combustion
6. Center of gravity
7. Weather cocking
8. Delay time
9. drag
10. Terminal velocity

Concepts (Explain)

1. How does a model solid rocket engine work?
2. How can you determine the thrust, delay time, and total impulse of the engine?
3. Explain the launch process from launch THROUGH recovery.
4. Explain Newton's 2nd Law of Motion and how it applies to your rocket.
5. Explain how you can determine how high your rocket went.

Assignment

1. In teams of two, build a model rocket
2. Take a picture of your completed rocket and post it on your website
3. Launch your rocket and determine how high it went – post this on your website.

Grading for rockets (300 pts possible)

Launch Attempts	1 st time – 35	2 nd time – 15 pts	3 rd time – 5 pts	Never – 0
Vocabulary	10 pts each			
Concepts	10 pts each			
Recovery	No damage – 35	Moderate damage – 25	Destroyed or not recoverable – 0	
Picture	30 pts			
Altitude determination	50 pts			
Best looking (extra credit by votes)	1 st place – 50	2 nd place – 25	3 rd place - 15	

Reference: <http://exploration.grc.nasa.gov/education/rocket/bgmr.html>