

Day 3

Expectations:

- demonstrate an understanding of the fundamental principles of taxonomy by classifying organisms from a local ecosystem
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PART 1: A. Individually list as many different living things as you can think of.
(Take 5 minutes)

B. In groups of 5 classify each of your living things into different categories. And give each category a name. (15 minutes)

PART 2 NOTE: Classifying Organisms (Taxonomy)

- Name the A-B-C organisms
- 2400 years ago Aristotle → Plantae
→ Animalia
- 17th century John Ray → species - similar in shape and structure
- reproduced and their offspring reproduced
- 1665 Invention of the microscope opened a whole new world (microorganisms)
- early 1700s' - Carolus Linnaeus
 - used simple characteristics to name different species
(Petal colour, # of petals, arrangement...)
- Binomial nomenclature - names of species consist of two words: genus and species
example: *Felis domesticus*
- 1866 Ernst Haeckel identified the kingdom Protista
 - all 1 celled organisms not plant or animal and are eukaryotic
- Taxonomy is the science of naming and assigning organisms to taxa
 - Kingdom–Phylum–Class–Order–Family–Genus–Species
 - “species” is the smallest taxon group and it represents a single species
 - estimated 30+ million spp. in the world
- a Dichotomous key is a series of “yes-no” questions that lead to the identity of an organism

PART 3: Identify the name for each of the Wacky People using the Dichotomous Key

Dichotomous Key Activity

The purpose of using the key is to name the creature shown. Stick with one character until the name is reached, then go to the next.

A dichotomous key gives instructions in pairs of statements. With each character, start with the first pair of statements. Decide which description describes your chosen character best and follow the line to the right. There will either be a number or a name. If it is a number, go to the pair of steps with that number, for example, if the number is 3, go to steps 3a and 3b. If the line ends in a name you have identified your character, so write it down by the creature. Continue until each creature has a name. There is only one creature per name, and no creature has two names.

Wacky People Key

1a Two feet	2
1b Some other number of feet	3
2a Does not look at all human	4
2b Looks a lot like a human	5
3a One leg	6
3b Three or four legs	7
4a Fly-like	Mosk Cara
4b Not fly-like	8
5a Seems to be a girl	Rita Nita
5b Not a girl	9
6a Leg is curled , two feet	Ru-ela.Brella
6b Leg is straight, one foot	Giggles
7a Three legs	10
7b Four legs	11
8a Has webbed feet	Hex Oculate
8b Clawed feet	12
9a Curly hair, no toes	Lugio Wirum
9b Wiggly looking mouth, three toes on feet	C. Nile
10a Very long nose, open mouth	Elle E. Funk
10b Some other appearance	13
11a Has duck bill, two pinchers	Tri D. Duckt
11b No arms or pinchers	14
12a Has ears, tail, and beak	Grif Leon
12b Four eyes on stalks	Eggur Ondy
13a One eye, webbed feet	Cue Kide
13b Four stalked eyes, four pinchers	Quadrumenox
14a Three toed feet, nose like a flower	Tunia petalos
14b Spider-like, has spots	Patterned mulywumpus

WACKY PEOPLE

