Taxonomy and Dichotomous Keys

- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species
Taxonomy is the science of naming, describing and classifying organisms. It includes all plants, animals and microorganisms of the world. Using morphological, behavioural, genetic and biochemical observations, taxonomists identify, describe and arrange species into classifications.
• Taxonomists provide unique names for species, labels that can help us find out more about them, and enable us to be sure that we are all talking about the same thing.

• Crash course video on taxonomy: https://www.youtube.com/watch?v=F38BmgPcZ_I
Dichotomous Keys

7.11A examine organisms or their structures and use dichotomous keys for identification
ESSENTIAL QUESTION: How can you use dichotomous keys to classify and identify organisms?

OBJECTIVES:
1. Dichotomous Keys Introduction
2. Dichotomous Keys Gizmo Lab – (HW if not completed in class)
**Dichotomous Key - Terms**

1. **Variation (or Variability):** differences among traits or characteristics of an organism.
2. **Species:** a group of organisms that are able to successfully reproduce.
3. **Dichotomous Key:** A tool used in plant or animal identification. It is a series of questions, and each question is a choice between two characteristics. You can find the organism’s identity through the process
Purpose of Keys

To classify organisms
• In just a minute you will get a computer and the worksheets

• Go to my website, Unit 6 and find the link for Gizmo website (brown button)

• Once on the Gizmo (Explore learning) website, log in with your user name and password.

• Click on “Dichotomous Keys” lab or search for it in the search bar.
Gizmo Lab

Name: ___________________________ Date: _______________________

Student Exploration: Dichotomous Keys

Vocabulary: dichotomous key, genus, organism, scientific name, species, traits

Prior Knowledge Question (Do this BEFORE using the Gizmo.)

Jerome is walking through a park when he sees the spider shown at left. How could Jerome find out what type of spider it is?

Gizmo Warm-up

In the field, scientists often have to identify an unfamiliar organism (living thing). A reliable way to identify organisms is to use a dichotomous key. A dichotomous key is a series of paired statements or questions that lead to the identification of an organism.

The Dichotomous Keys Gizmo™ allows you to use five different dichotomous keys to identify a variety of organisms. To begin, make sure California Albatrosses and Organism A are selected.

1. Read the two statements at lower right. Which of the two statements most closely matches the characteristics of the bird pictured?

2. Select that statement and click Next. Continue until you have correctly identified the albatross. If you change your mind about a choice, you can click the Back button. If you incorrectly identify the albatross, you can click the Start Over button and try again.

A. What is the name of the albatross? ________________

B. The scientific name is shown in italics. Scientific names have two parts: the genus name and the species name. What is the scientific name of this albatross? ________________