

<b>CHAPTER 3</b>	<b>Using Dichotomous Keys</b>	<b>BLM 3.2.5</b>
<b>HANDOUT</b>		

Have you ever looked at a bird, a rock, or plant and wondered what it was? If so, you might have used a field guide to learn more about it. Most field guides use physical descriptions, illustrations/photographs, and information about plants, animals, mushrooms, rocks, minerals, and even animal scat. One tool that scientists use to assist in the identification and classification of specimens is the dichotomous key. You should note that dichotomous keys are human made and subject to modification.

### How to Use a Dichotomous Key

- A dichotomous key, as its name suggests, is a two-step key (the prefix “di” means two). You might think of this tool as an “either / or” key. Either the specimen has the trait you are looking at or it doesn’t have this trait. In other words, at each decision point within a key, there will be two descriptions, one after the other on the left hand side of the page.
- You decide which statement best applies to the specimen that you are examining, and read what is written to the right of the description.
- You will notice that at the end of each description is either the classification of the specimen or directions to go onto another step in the key. If it is a number, look for it below in the key for the next decision.

### Key to the Kingdoms in the Domain Eukarya

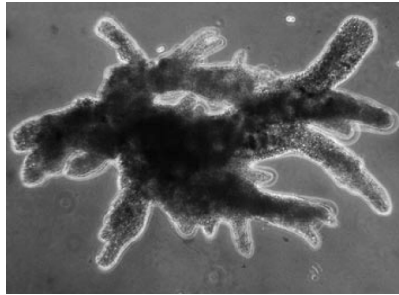
#### Description

#### Kingdom or Next Step in the Key

1a. Organism is unicellular, colonial or multicellular; lacks complex tissues or systems	Kingdom Protista
1b. Organism is unicellular or multicellular; once considered to be part of the Kingdom Plantae because it is sessile (does not move)	Go to step 2
2a. Organism uses photosynthesis to make its own food; it is sessile but is complex with specialized cells	Kingdom Plantae
2b. Organism does not use photosynthesis: it is a heterotroph	Go to Step 3
3a. Organism absorbs nutrients after digesting them externally; it has cell walls made of chitin	Kingdom Fungi
3b. Organism ingests food and digests it internally; it is complex and has specialized cells	Kingdom Animalia

**CHAPTER 3****HANDOUT****Using Dichotomous Keys****BLM 3.2.5****What to Do**

1. Use the Key to the Kingdoms of Eukarya above to classify the following organisms.
2. List the steps that you followed in this key to arrive at your decision.



Organism #1

Steps: \_\_\_\_\_

Kingdom: \_\_\_\_\_



Organism #2

Steps: \_\_\_\_\_

Kingdom: \_\_\_\_\_

**CHAPTER 3****HANDOUT****Using Dichotomous Keys****BLM 3.2.5**

Organism #3

Steps: \_\_\_\_\_

Kingdom: \_\_\_\_\_



Organism #4

Steps: \_\_\_\_\_

Kingdom: \_\_\_\_\_