

## Dichotomous Key Practice

7<sup>th</sup> Grade Science  
Unit 11

### Objective

Identify an organism by analyzing its structural characteristics and using a dichotomous key.

### Background Information

A dichotomous key is a tool used to identify all the different kinds of organisms within the six kingdoms of living organisms. It is a branching key in which there are two or more choices in each branch. The last choice in the key will identify what the scientist is trying to determine. A dichotomous key can be used to identify animals, plants, and other organisms and objects. Dichotomous keys work best when they are divided into groups and then further divided into smaller groups. Some dichotomous keys used to identify plants or animals ask *yes* or *no* questions. They also rely on looking for clear differences. Questions in the dichotomous key are numbered and answered in order.

### Procedure

1. Beginning with button 1, read the first set of paired statements (1a and 1b) and select one statement in the pair that best describes button 1.
2. Follow the directive at the end of the statement you selected (go to . . .) Read the next set of paired statements and select the statement that best fits button 1.
3. Continue this process until you have no more choices. When you have completed the process, you will have "keyed" or identified the button. Write the name of the button in the table on the next page.
4. Repeat steps 1-3 to key the remaining buttons.
5. Remember these pointers as you complete the activity:
  - a. Always begin with statements 1a and 1b every time you key a new button.
  - b. If you seem to be at a dead end, you may have taken a wrong turn earlier. Start over and carefully reconsider each step
  - c. As you are keying a particular button, look at the other buttons to help you observe the differences in the same structures on different buttons. For example how does the texture differ in buttons 2, 8, and 10.

1.



2.



3.



4.



5.



6.



7.



8.



9.



10.



1A	The button has holes -----Go to 2
1B	The button does not have holes -----Go to 7
2A	Button has 2 holes-----go to 3
2B	Button has 4 holes-----go to 5
3A	Button is oval-----Peter
3B	Button is round-----Go to 4
4A	Button has a circle design-----Suzy
4B	Button has no design-----David
5A	Button is square, round corners-----Charles
5B	Button is round-----Go to 6
6A	Button is large, white-----Linda
6B	Button is small, multicolored-----Bert
7A	Button is square-----Nancy
7B	Button is round-----Go to 8
8A	Button is textured-----Go to 9
8B	Button is smooth-----Joe
9A	Button is metallic-----Grandpa
9B	Button is covered with fabric-----Granny

**Procedure**

Use the Dichotomous Key to the left to identify the buttons above.

Button #	Button Name
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	