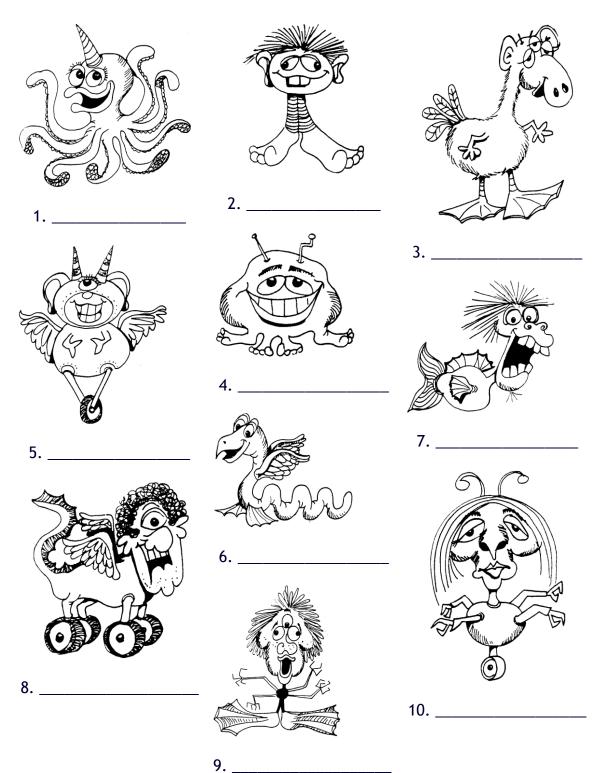
Name	Date
Mrs. Konstantinova	
Living Environment	Section

# **Dichotomous Key LAB Activity**

*Directions:* Give each of the following creatures a name (be creative). Then read the introduction below



## **Dichotomous Key Activity**

## Introduction

In science we use many helping aids to organize and easily retrieve information. This particular activity is a dichotomous key activity. A dichotomous key is a tool that scientists can use to help identify a particular specimen. The specimen could be a chemical that is identified by its physical properties, an insect identified by its markings and traits, or even a rock sample based on its different properties. The term dichotomous begins with the prefix of "di" which means two. The dichotomous key allows for the scientist to ask a series of questions with yes or no answers. Each question should be phrased so that the answer will either be <u>yes</u> or <u>no</u>. Below there are questions that will show you an example of how to make a dichotomous key for the creatures, which you have just named, on the previous page.

Before you proceed, you need to choose one of the creatures on the previous page. Below I will ask you a yes or no question about your creature. I have set this key up as an example. After this activity you will practice with dichotomous key regent questions. This will count as a lab; I will **collect this next lab day**.

1. Does your creature have feet? \_\_\_\_\_ (if yes, go to Question #2) (if NO, go to question #4)

2. Does your creature have two eyes?\_\_\_\_\_ (if yes, go to Question #3) (if NO, go to question #7)

3. Does your creature have two feet?\_\_\_\_\_ (if yes, go to Picture #1 on the next page) (if no, go to picture#3)

4. Does your creature have wheels?\_\_\_\_\_ (if yes, go to Question #5) (if NO, go to question #8)

5. Does your creature have one wheel?\_\_\_\_\_ (if yes, go to Question #6) (if NO, go to picture7)

6. Does your creature have one eye?\_\_\_\_\_(if yes go to picture #2) (if No, go to picture 8)

7. Does your creature have two arms? \_\_\_\_\_ (if yes, go to picture 10) (if NO, go to picture 9)

- 8. Does your creature have teeth?\_\_\_\_\_ (if yes, go to picture 4) (if NO, go to question # 9)
- 9. Does your creature have wings?\_\_\_\_\_ (if yes, go to picture 5 ) (if NO, go to picture 6 )

Picture 1	This must be the creature you chose.
You have determined that your organism has feet, has two eyes and has two feet	
Picture 2	
You have determined that your organism does not have feet but has wheels, only has one wheel, and one eye.	
Picture 3	
Picture 4	
Picture 5	
Picture 6	
Picture 7	
Picture 8	
Picture 9	
Picture 10	

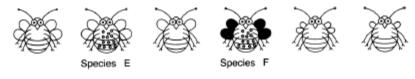
## **Regent Questions:**

**1.** Base your answer on the accompanying diagram and on your knowledge of biology. The diagram represents six insect species.

A dichotomous key to these six species is shown in the accompanying diagram.

a Complete the missing information for sections 5.a. and 5.b. so that the key is complete for all *six* species. [1]

b Use the key to identify the drawings of species A, B, C, and D. Place the letter of each species on the line located below the drawing of the species or on a separate piece of paper. [1]



#### Part a

#### **Dichotomous Key**

1.	a. b.	has small wings
2.	a. b.	has a single pair of wings Species A has a double pair of wings Species B
3.	a. b.	has a double pair of wings
4.	a. b.	has spots
5.		Species E

#### Part b







Species



Species





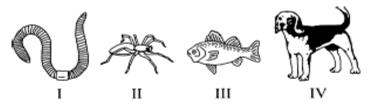
Species

Species

Species E

Species F

**2.** Fill in all of the blanks in parts 2 and 3 of the dichotomous key shown in the accompanying diagram and chart, so that it contains information that could be used to identify the four animals shown. [2]



## **Dichotomous Key**

1. a. Legs present	Go to 2
b. Legs not present	Go to 3
Characteristic	Organism

55 A dichotomous key is shown below.

### **Dichotomous Key**

1. a.	tail fins are horizontalgo to 2
b.	tail fins are verticalgo to 3
2. a.	has teeth or tuskgo to 4
b.	has no teeth <b>Balaena mysticetus</b>
3. a.	has gill slits behind mouthgo to 5
b.	has no gill slits <b>Lepidosiren paradoxa</b>
4. a. b.	black with white underside
5 0	here al to be used to be a set of the set of

