Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**DIRECTED READING SECTION 1**

**CLASSIFICATION CHAPTER 9**

**pages 202-206**

Period \_\_Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**I CAN** explain how living things are classified based on their physical and inherited characteristics.

 List the seven levels of classifi-

 cation in order.

 Describe the science that Carolus

 Linnaeus is recognized for.

 Interpret a branching evolutionary

 diagram.

 Interpret a dichotomous key to

 identify a species.

 Write Scientific Names correctly &

 identify the classification level

 of each of the two scientific names.

**As you read Chapter 9, which begins on page 200 of your**

**textbook, answer the following questions.**

**Section 1: Classification: Sorting It All Out (p. 202)**

**1.** Organizing plants based on whether they are

 poisonous or not is an example of classification.

 True or False? (Circle one.)

**Why Classify? (p. 202)**

**2.** Why do biologists classify organisms? (Circle all that apply.)

**a.** to make sense of the sheer number of living things

**b.** to discover how many known species there are

**c.** to help study the characteristics of known species

**d.** to study the relationships between species

**Levels of Classification (p. 203)**

**3.** What are the seven levels of classification?

 1.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7.)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9 DIRECTED READING WORKSHEET**

**4.** Look at Figure 2. Why do you think the bird is included in phylum Chordata but not in class Mammalia? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What Is the Basis for Classification? (p. 204)**

**5.** Carolus Linnaeus founded taxonomy, the science of studying the past.

True or False? (Circle one.)

**6.** What is the definition of taxonomy? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Choose the animal ancestor in Column B that best matches the group of animals in Column A, and write the corresponding letter in the space provided.

**Column A**  **Column B**

**7**. \_\_\_\_\_the brown bear, lion, and house cat **a.** an ancient mammal

**8.** \_\_\_\_\_the house cat and the platypus **b.** an ancient carnivore

**9.** \_\_\_\_\_the house cat and the lion **c.** an ancient cat

**Naming Names (p. 205)**

**10.** In the scientific name for the Indian elephant, *Elephas maximus,Elephas* is the\_\_\_\_\_\_\_\_\_\_\_\_ and *maximus* is the\_\_\_\_\_\_\_\_\_\_\_\_\_. Since *Tyrannosaurus rex* can beabbreviated *T. rex, Elephas maximus* can be abbreviated \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

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**Dichotomous Keys (p. 206)**

**11. Look up** “Dichotomous Keys” in the glossary and copy the COMPLETE definition.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**11.** After you read about dichotomous keys on page 206, look at the dichotomous key given on

page 207. What type of animal has a long, non-flattened naked tail and doesn’t fly?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mnemonic to remember the levels of classification:**

***King Philip Came Over For Grape Soda***

**Mnemonic Classification Analogy**

**12.** King \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**13**. Philip \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**14**. Came \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**15**. Over \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**16**. For \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**17**. Grape \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**18**. Soda \_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**I CAN** explain how living things are classified based on their physical and inherited characteristics.

 Interpret a branching

 evolutionary diagram.

Period\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**BRANCHING DIAGRAM**

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**After studying the above branching diagram, answer the following questions. Refer to pg. 204**

1. After which animals did mammary glands develop?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What animal does not have jaws? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Which animals have lungs? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. Which animal is most closely related to the mouse?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. What other animals would come after the chimp? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Which animals would come before the hagfish? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_