

Sorting It All Out
Chapter 9, Section 1

Directions: Read pages 222-227 and answer the following questions. Use complete sentences for 1, 2, 8, 10, and 19.

1. What is classification?

WHY CLASSIFY?

2. Write 5 important facts that you learned from this section. Use completed sentences.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

HOW DO SCIENTISTS CLASSIFY ORGANISMS?

3. Before the 1600s, scientists divided organisms into what two groups?

_____ and _____

_____ 4. Taxonomy is the science of

- a. naming plants and animals.
- b. describing organisms.
- c. naming and describing living things.
- d. describing, classifying, and naming organisms.

4. What Swedish scientist created the first organized, modern taxonomy? _____

5. How many levels of classification do scientists use today? _____

_____ 6. The more closely related living things are to each other, the more

- a. characteristics they share.
- b. food they share.
- c. space they share.
- d. water they will share.

_____ 7. Organisms are thought to be closely related when they have

- a. almost no characteristics in common.
- b. no characteristics in common.
- c. few characteristics in common.
- d. many characteristics in common.

8. What characteristics do the bear, lion, and house cat have that the platypus does not have?

_____ 9. Bears, lions, and house cats give birth to live young, and lions and house cats have retractable claws. Which of the three types of animals are most closely related?

- a. lions and house cats
- b. lions and bears
- c. house cats and bears
- d. None of the animals are related.

LEVELS OF CLASSIFICATION

10. Write FOUR important facts that you learned about this section. Facts should be written using complete sentences.

- a. _____
- b. _____
- c. _____
- d. _____

SCIENTIFIC NAMES

11. No matter how many common names an organism might have, it only has one _____

12. In the scientific name for the Asian elephant, *Elephas maximus*, the word *Elephas* indicates the animal's _____.

13. All genus names begin with a(n) _____.

14. All specific names begin with a(n) _____.

15. Scientific names are usually in one of these two languages, _____ or _____.

16. In the scientific name *Tyrannosaurus rex*, what is the species name? _____

17. What abbreviation do scientists sometimes use when referring to *Tyrannosaurus rex*?
_____.

18. What is the scientific name for the common house cat? _____.

A GROWING SYSTEM

19. Write FOUR important facts that you learned about this section. Facts should be written using complete sentences.

- a. _____
- b. _____
- c. _____
- d. _____

_____ 20. What do scientists do when a newly discovered organism does not fit any existing category?

- a. leave the organism alone
- b. try to change the organism
- c. destroy the organism
- d. create a new category