In your textbook, read about how living things are classified.

Examine the table showing the classification of four organisms. Then answer the questions.

Taxon	Green Frog	Mountain Lion	Domestic Dog	Human
Kingdom	Animalia	Animalia	Animalia	Animalia
Phylum	Chordata	Chordata	Chordata	Chordata
Class	Amphibia	Mammalia	Mammalia	Mammalia
Order	Anura	Carnivora	Carnivora	Primates
Family	Ranidae	Felidae	Canidae	Hominidae
Genus	*Rana*	*Felis*	*Canis*	*Homo*
Species	*Rana clamitans*	*Felis concolor*	*Canis familiaris*	*Homo sapiens*

16. Which taxon includes the most specific characteristics? _____

17. Which taxon includes the broadest characteristics? _____

18. Which taxon includes more species, an order or a family? _____

19. Which taxon includes only organisms that can successfully interbreed? _____

20. If two organisms belong to the same family, what other taxonomic groups do the organisms have in common.

_____

21. Which two organisms in the chart are most closely related? Explain.

_____

_____

_____

_____

22. To which taxa do all four organisms belong?

_____

23. Which class does not include animals that have hair or fur? _____

24. What is the order, family, and genus of a human?

_____

25. Using the information in the chart, what can you conclude about the classification taxa of an organism with the scientific name *Rana temporaria*?

_____

_____

_____

Name Date Class

Chapter

Organizing Life's Diversity

Reinforcement and Study Guide

Section 17.1 Classification

In your textbook, read about how classification began and about biological classification.

For each item in Column A, write the letter of the matching item in Column B.

Column A		Column B
_____	1. Grouping objects or information based on similarities	a. Aristotle
_____	2. Naming system that gives each organism a two-word name	b. Linnaeus
_____	3. Developed the first system of classification	c. genus
_____	4. Branch of biology that groups and names organisms	d. classification
_____	5. Designed a system of classifying organisms based on their physical and structural similarities	e. taxonomy
_____	6. Consists of a group of similar species	f. binomial nomenclature

If the statement is true, write *true*. If it is not, rewrite the italicized part to make it true.

7. The scientific name of a species consists of a *family* name and a descriptive name.

_____

8. The scientific name of modern humans is *Homo sapiens*.

_____

9. *Latin* is the language of scientific names.

_____

10. The *scientific* names of organisms can be misleading.

_____

11. Taxonomists try to identify the *evolutionary relationships* among organisms.

_____

12. Besides comparing the structures of organisms, taxonomists also compare the organisms' geographic distribution and *chemical makeup*.

_____

13. Similarities between living species and extinct species *cannot* be used to determine their relationship to each other.

_____

14. Because the bones of some dinosaurs have large internal spaces, some scientists think dinosaurs are more closely related to *amphibians* than to reptiles.

_____

15. Classification can be useful in identifying the *characteristics* of an unknown organism.

_____