

## Section 18-3 Kingdoms and Domains (pages 457-461)



**TEKS FOCUS:** 8C Characteristics of kingdoms—archaebacteria, eubacteria, protists, fungi, plants, animals

*This section describes the six kingdoms of life as they are now identified. It also describes the three-domain system of classification.*

### The Tree of Life Evolves (pages 457-458)

1. Is the following sentence true or false? The scientific view of life was more complex in Linnaeus's time. \_\_\_\_\_

2. What fundamental traits did Linnaeus use to separate plants from animals?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. What type of organisms were later placed in the kingdom Protista?

\_\_\_\_\_

\_\_\_\_\_

4. Mushrooms, yeast, and molds have been placed in their own kingdom, which is called \_\_\_\_\_.

5. Why did scientists place bacteria in their own kingdom, the Monera? \_\_\_\_\_

\_\_\_\_\_

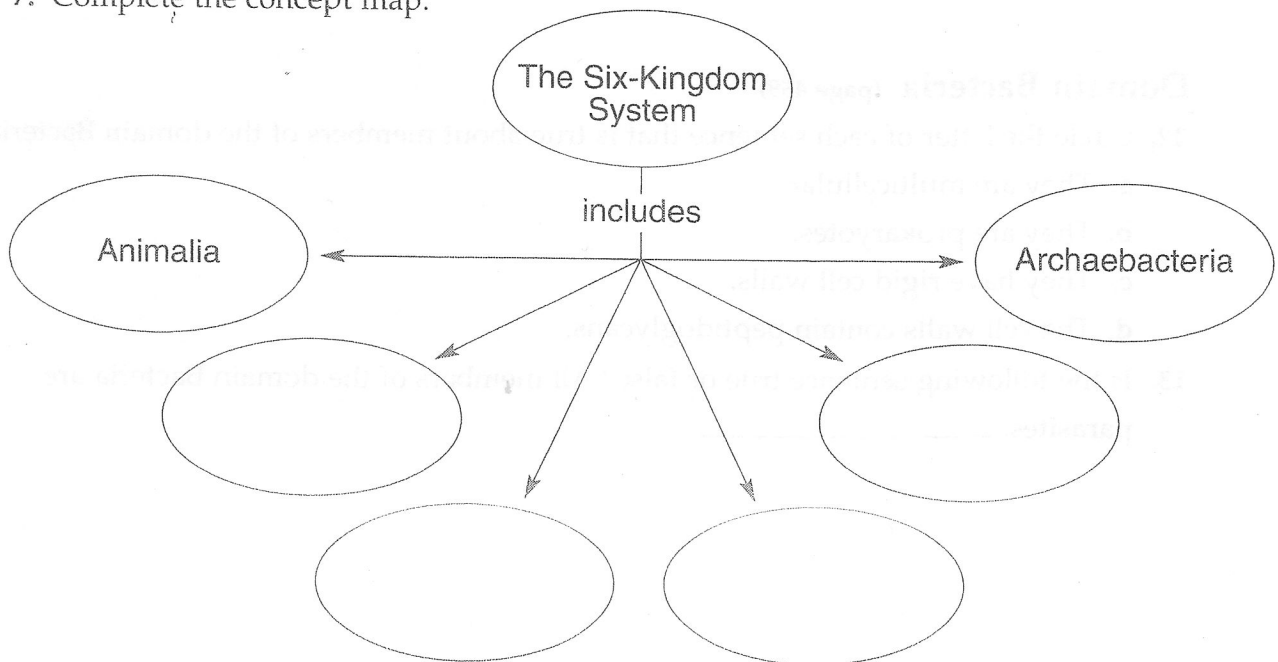
\_\_\_\_\_

6. List the two groups into which the Monera have been separated.

a. \_\_\_\_\_

b. \_\_\_\_\_

7. Complete the concept map.



**The Three-Domain System** (page 458)

8. A more inclusive category than any other, including the kingdom, is the \_\_\_\_\_.
9. What type of analyses have scientists used to group modern organisms into domains? \_\_\_\_\_
10. List the three domains.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
11. Complete the chart below.

**CLASSIFICATION OF LIVING THINGS**

Domain	Kingdom	Examples
	Eubacteria	<i>Streptococcus, Escherichia coli</i>
Archaea		
	Protist	
		Mushrooms, yeasts
	Plantae	
		Sponges, worms, insects, fishes, mammals

**Domain Bacteria** (page 459)

12. Circle the letter of each sentence that is true about members of the domain Bacteria.
  - a. They are multicellular.
  - b. They are prokaryotes.
  - c. They have rigid cell walls.
  - d. The cell walls contain peptidoglycans.
13. Is the following sentence true or false? All members of the domain Bacteria are parasites. \_\_\_\_\_

**Domain Archaea** (page 459)

14. Circle the letter of each sentence that is true about members of the domain Archaea.

- a. They are unicellular.
- b. They are eukaryotes.
- c. They lack cell walls.
- d. They lack cell membranes.

15. Is the following sentence true or false? Many members of the domain Archaea can survive only in the absence of oxygen. \_\_\_\_\_

**Domain Eukarya** (pages 460–461)

16. Circle the letter of each sentence that is true about all the members of the domain Eukarya.

- a. They have a nucleus.
- b. They are multicellular.
- c. They are heterotrophs.
- d. They have cell walls and chloroplasts.

*Match each kingdom with the description that applies to members of that kingdom.*

Kingdom	Description
_____ 17. Protista	a. They have cell walls of chitin.
_____ 18. Fungi	b. They have no cell walls or chloroplasts.
_____ 19. Plantae	c. They include slime molds and giant kelp.
_____ 20. Animalia	d. They include mosses and ferns.