

Section 18–3 Kingdoms and Domains (pages 457–461)

Key Concepts

- What are the six kingdoms of life as they are now identified?
- What is 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 _____.

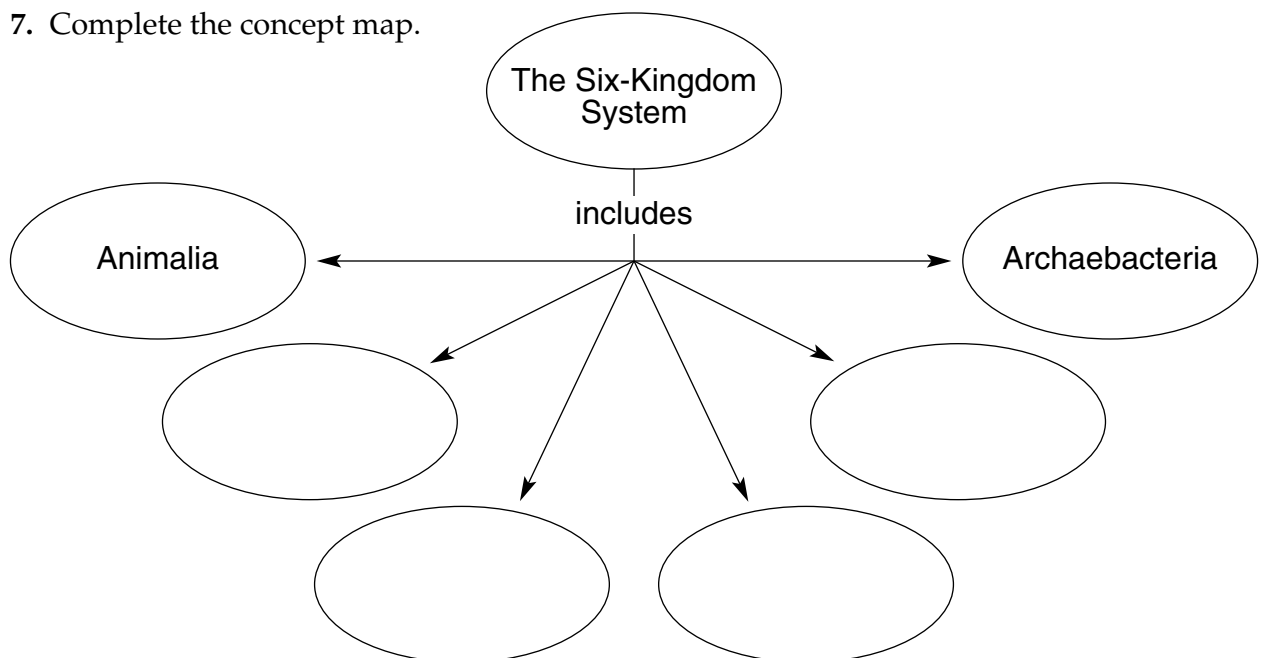
5. Why did scientists place bacteria in their own kingdom, the Monera? _____

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.