

Skills Worksheet

Directed Reading A

Section: Domain and Kingdoms

1. Before the discovery of organisms like *Euglena*, how were all organisms classified ?

WHAT IS IT?

- _____ 2. Scientists classify organisms based on their what?
- a. shape
 - b. smell
 - c. size
 - d. characteristics
- _____ 3. Which characteristic is *not* true for euglenoids including the genus *Euglena*?
- a. single celled
 - b. live in salt water
 - c. live in pond water
 - d. make their own food
- _____ 4. A green color and the ability to make food through photosynthesis might make some people think that members of the genus *Euglena* are
- a. trees.
 - b. algae.
 - c. plants.
 - d. mosses.
- _____ 5. Which is a characteristic that animals and members of the genus *Euglena* possess but plants do not?
- a. ability to move by themselves
 - b. ability to make food
 - c. ability to take in water
 - d. ability to use energy
6. What kingdom did scientists add to create a classification for organisms that had characteristics of both plants and animals?

7. Today, there are _____ domains in the classification system.

THE DOMAIN ARCHAEA

8. Single-celled organisms that do not have a nucleus are called

_____.

9. How are archaea distinguished from other prokaryotes?

Directed Reading A *continued*

Identify the correct bacteria kingdom for the organisms described below by writing Archaea or Bacteria in the space provided.

- _____ **10.** Some of these live inside humans.
- _____ **11.** One of these causes pneumonia.
- _____ **12.** These live in places where most other organisms could not live.
- _____ **13.** Its name comes from a word that means “ancient.”
- _____ **14.** One type turns milk into yogurt.

THE DOMAIN BACTERIA

15. Prokaryotes that usually have a cell wall and that usually reproduce by cell division belong to the domain _____.

THE DOMAIN EUKARYA

- 16.** All organisms whose cells have a nucleus and membrane-bound organelles are called _____.
- 17.** All eukaryotes belong to the domain _____.
- 18.** Members of the kingdom Protista are called _____.
- 19.** Protists that have animal-like characteristics are called _____.
- 20.** Protists that have plantlike characteristics are called _____.
- 21.** Unlike plants, fungi do not use _____.
- 22.** Unlike animals, _____ do not eat food.
- 23.** How do fungi absorb nutrients from their surroundings?

- 24.** Give two examples of fungi.

Directed Reading A *continued*

25. What do all members of the kingdom Plantae have in common?

26. In order for plants to make their own food through photosynthesis, they must be exposed to _____.

27. Where are plants found?

28. Explain why the food that plants make is important not only to the plants themselves but to other organisms as well.

29. What are two ways plants are used by other organisms?

30. What characteristics do most members of kingdom Animalia share?

31. Members of kingdom Animalia have specialized sense organs that allow them to respond to their _____.

32. Members of kingdom Animalia are commonly called _____.

33. Explain why animals need plants.

Directed Reading A *continued*

34. Explain how animals depend on bacteria and fungi.

STRANGE ORGANISMS

35. The kingdom Animalia includes some very simple animals, such as

_____, that do not have sense organs and cannot move.

Section Review

Domains and Kingdoms

USING KEY TERMS

For each pair of terms, explain how the meanings of the terms differ.

1. *Archaea* and *Bacteria*

2. *Plantae* and *Fungi*

UNDERSTANDING KEY IDEAS

- _____ 3. Biological classification schemes change
- a. as new evidence and more kinds of organisms are discovered.
 - b. every 100 years.
 - c. when scientists disagree.
 - d. only once.

4. Describe the characteristics of each of the three domains.

5. Describe the four kingdoms of domain Eukarya.

Section Review *continued*

MATH SKILLS

6. A certain bacterium can divide every 30 min. If you begin with 1 bacterium, when will you have more than 1,000 bacteria? Show your work below.

CRITICAL THINKING

7. **Identifying Relationships** How are bacteria similar to fungi? How are fungi similar to animals?

8. **Analyzing Methods** Why do you think Linnaeus did not include classification kingdoms for categories of archaea and bacteria?

9. **Applying Concepts** The Venus' flytrap does not move around. It can make its own food by using photosynthesis. It can also trap insects and digest the insects to get nutrients. The flytrap also has a cell wall. Into which kingdom would you place the Venus' flytrap? What makes this organism unusual in the kingdom you chose?
