

Skills Worksheet

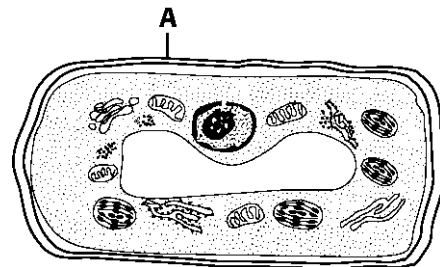
Test Prep Pretest

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. The surface area-to-volume ratio of a small cell is
 a. greater than that of a larger cell.
 b. less than that of a larger cell.
 c. equal to that of a larger cell.
 d. not affected by the cell's size.
- _____ 2. In prokaryotic cells, the genetic material is found in
 a. the DNA and RNA. c. the nucleus.
 b. the nucleolus. d. a single loop.
- _____ 3. In eukaryotic cells, mitochondria
 a. transport materials. c. produce ATP.
 b. make proteins. d. control cell division.
- _____ 4. Which cell structures do all bacteria and plants have in common?
 a. chloroplasts c. a cell wall
 b. pili d. Both (a) and (c)
- _____ 5. Which of these are always unicellular?
 a. prokaryotes c. protists
 b. eukaryotes d. flagella
- _____ 6. Most animals and plants have groups of cells with a similar structure and function that are organized into
 a. organ systems. c. nerves and muscles.
 b. tissues. d. All of the above

Questions 7 and 8 refer to the figure at right.

- _____ 7. The cell in the figure is a
 a. prokaryotic cell.
 b. eukaryotic cell.
 c. plant cell.
 d. Both (b) and (c)
- _____ 8. The structure labeled A
 a. supports the cell.
 b. protects the cell.
 c. surrounds the cell membrane.
 d. All of the above



Test Prep Pretest *continued*

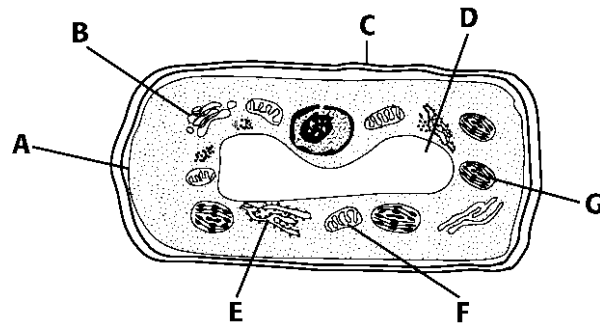
Complete each statement by writing the correct term or phrase in the space provided.

9. Scientists first discovered cells by using a(n) _____.
10. A cell's boundary is called the _____
_____.
11. _____ are cell structures common to both prokaryotes and eukaryotes on which proteins are made.
12. Eukaryotes differ from prokaryotes in that only eukaryotic cells have a(n) _____ and membrane-bound _____.
13. The nucleus has a double membrane, called the nuclear envelope, that helps protect a cell's _____ from becoming damaged or lost.
14. In plant cells, rigidity is provided by a large, membrane-bound sac called the _____.
15. When a cell makes proteins that are to be transported outside the cell, the proteins are packaged in the _____, modified and repackaged in the _____, and then transported to the cell membrane.
16. Vesicles which contain enzymes that break down large molecules are called _____.
17. The _____ is a network of protein fibers that supports a cell and aids in its movement.
18. Organelles that use light energy to make sugar from water and carbon dioxide are called _____.
19. A(n) _____ is made up of different kinds of tissues arranged together to perform a specific function.

Test Prep Pretest *continued*

20. A collection of identical cells that live together as a group, although individuals can survive on their own, is called a(n) _____.
21. Cells in a(n) _____ organism cannot survive on their own.

Questions 22–28 refer to the figure below.



22. The structure labeled *A* is the _____.
23. The organelle labeled *B* is the _____.
24. The structure labeled *C* is the _____.
25. The structure labeled *D* is the _____.
26. The organelle labeled *E* is the _____.
27. The organelle labeled *F* is a(n) _____.
28. The organelle labeled *G* is a(n) _____.

Read each question, and write your answer in the space provided.

29. List the three parts of the cell theory.

Test Prep Pretest *continued*

30. List the primary differences between prokaryotes and eukaryotes.
