

**Chapter
18****Viruses and Bacteria, continued****Reinforcement and Study Guide****Section 18.2 Archaeobacteria and Eubacteria**

In your textbook, read about the diversity of prokaryotes and about the characteristics of bacteria.

Answer the following questions.

1. What are three types of environments in which archaeobacteria are found? _____

2. In what three ways do eubacteria obtain nutrients? _____

3. How does a bacterium's cell wall protect it? _____

4. Where is the genetic material of a bacterium found? _____

5. What structure do some bacteria use to move? _____
6. What is the difference between gram-positive bacteria and gram-negative bacteria? _____

7. What are three different shapes of bacteria? _____
8. Describe the three growth patterns of bacteria and state the prefix used to identify each growth pattern.

Identify the type of bacterial reproduction described. Use these choices: binary fission, conjugation.

- _____ **9.** Bacterium with a new genetic makeup is produced.
- _____ **10.** Circular chromosome is copied.
- _____ **11.** Genetic material is transferred through a pilus.
- _____ **12.** Two identical cells are produced.
- _____ **13.** Sexual reproduction occurs.

Chapter
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In your textbook, read about adaptations in bacteria and the importance of bacteria.

Circle the letter of the choice that best completes the statement.

- 14.** Scientists think the first bacteria on Earth were
a. aerobic. b. anaerobic. c. fatal. d. oxygen-dependent.
- 15.** Bacteria that are obligate anaerobes release energy from food by
a. cellular respiration. b. using oxygen.
c. using nitrogen. d. fermentation.
- 16.** As an endospore, a bacterium
a. produces toxins. b. dries out. c. causes diseases. d. is protected.
- 17.** Botulism is caused by endospores of *C. botulinum* that have
a. been killed. b. produced toxins.
c. germinated. d. reproduced.
- 18.** Nitrogen is important because all organisms need it to make
a. proteins. b. ATP. c. DNA. d. all of these.
- 19.** The process by which bacteria use enzymes to convert nitrogen gas into ammonia is called
a. nitrogenation. b. atmospheric separation.
c. nitrogen fixation. d. eutrophication.
- 20.** Bacteria return nutrients to the environment by breaking down
a. dead organic matter. b. inorganic materials.
c. enzymes and sugar. d. nitrogen in legumes.
- 21.** Bacteria are *not* used to make
a. vinegar. b. jams. c. cheese. d. yogurt.
- 22.** Bacteria are responsible for the following diseases:
a. strep throat and tetanus. b. gonorrhea and syphilis.
c. tuberculosis and diphtheria. d. all of these.
- 23.** Due to reduced death rates from bacterial diseases and improved sanitation and living conditions, the average person born in the United States today will live to be about
a. 25 years old. b. 50 years old.
c. 75 years old. d. 90 years old.