



Directed Reading for  
Content Mastery

## Section 1 ■ What are bacteria?

**Directions:** Circle the term that correctly completes the sentence.

1. Antonie van Leeuwenhoek discovered bacteria in the (17th/20th) century.
2. A bacterium has one (chromosome/ribosome) that holds its genetic material.
3. Whiplike tails called (ribosomes/flagella) help bacteria move.
4. Rod-shaped bacteria are called (bacilli/cocci).
5. Sphere-shaped bacteria are called (spirilla/cocci).
6. (Eubacteria/Archaeobacteria) can live in extremely hot environments.
7. (Fission/Pasteurization) is the simplest form of asexual reproduction.
8. Bacteria that live without oxygen are (aerobes/anaerobes).
9. The two kingdoms of bacteria are eubacteria and (archaeobacteria/protists).

**Directions:** Answer the following questions on the lines provided.

10. How do colonies of cyanobacteria benefit aquatic organisms?

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11. How do colonies of cyanobacteria harm aquatic organisms?

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12. When you see gas bubbling up out of a swamp or marsh, what can you suspect is in the water?

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13. Bacteria live in groups called colonies. Colonies are usually circular. The diameter (distance across) of a particular bacterial colony is 8 mm. The circumference of a circle is equal to  $\pi$  (3.14) times its diameter ( $C = \pi d$ ). What is the circumference of the colony?

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