

Active Reading

Section: The Diversity of Living Things

Read the passage below and answer the questions that follow.

A **fungus** (plural, *fungi*) is an organism whose cells have nuclei, cell walls, and no chlorophyll (the pigment that makes plants green). Cell walls act like miniature skeletons that allow fungi, such as mushrooms, to stand upright. A mushroom is the reproductive structure of a fungus. The rest of the fungus is an underground network of fibers. These fibers absorb food from decaying organisms in the soil.

Indeed, all fungi absorb their food from their surroundings. Fungi get their food by releasing chemicals that help break down organic matter, and then by absorbing the nutrients. The bodies of most fungi are huge networks of threads that grow through the soil, dead wood, or other material on which the fungi are feeding. Like bacteria, fungi play an important role in the environment by breaking down the bodies and body parts of dead organisms.

Like bacteria, some fungi cause diseases, such as athlete's foot. Other fungi add flavor to food. The fungus in blue cheese gives the cheese its strong flavor. And fungi called *yeasts* produce the gas that makes bread rise.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently, a main idea is accompanied by supporting information that offers detailed facts about main ideas.

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

- _____ 1. A fungus does not have
- | | |
|-----------------|--------------|
| a. cells. | c. fibers. |
| b. chlorophyll. | d. diseases. |
- _____ 2. What allows a fungus to stand upright?
- | | |
|---------------|-----------|
| a. cell walls | c. nuclei |
| b. a skeleton | d. soil |
- _____ 3. The reproductive structure of a fungus is (a)
- | | |
|-----------------------|-----------------|
| a. network of fibers. | c. mushroom. |
| b. fungi. | d. chlorophyll. |
- _____ 4. A fungus gets food from
- | | |
|----------------------|----------------------|
| a. chlorophyll. | c. yeast. |
| b. its surroundings. | d. None of the above |

Active Reading *continued*

- _____ **5.** Most of a fungus's body is its
a. mushroom. **c.** exoskeleton.
b. miniature skeleton. **d.** underground network of fibers.
- _____ **6.** A fungus's cells have
a. nuclei and cell walls. **c.** nuclei and chlorophyll.
b. cell walls and chlorophyll. **d.** None of the above

RECOGNIZING SIMILARITIES AND DIFFERENCES

One reading skill is the ability to recognize similarities and differences between two phrases, ideas, or things. This is sometimes known as comparing and contrasting.

Read the question and write the answer in the space provided.

- 7.** To what does the author compare the cell walls of a fungus?

- 8.** Name two ways in which fungi are similar to bacteria.

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

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

- 9.** What important role do fungi play in the environment?

- 10.** Name one undesirable disease that fungi are responsible for?

- 11.** What beneficial effect do fungi have on blue cheese?

- 12.** What effect do yeasts have on bread?

forest fire far away can affect the air in the city.

19. The forest floor may become littered with branches, leaves, and dead trees because fungi play an important role in breaking down dead organisms. Although bacteria also break down dead organisms, the lack of fungi could decrease the rate of decomposition of biotic factors in this forest ecosystem.

Active Reading

SECTION: ECOSYSTEMS: EVERYTHING IS CONNECTED

1. living and nonliving things
2. each other; abiotic factors
3. living and once living
4. nonliving
5. "without" or "not"
6. B
7. A
8. A
9. B
10. B
11. A
12. A
13. B
14. A
15. B
16. A
17. 1
18. 5
19. 2
20. 3
21. 4

SECTION: EVOLUTION

1. when it contains a gene that allows it to break the chemical down into harmless substances
2. the evolution of pest resistance among corn pests
3. the ability of one or more organisms to tolerate a particular chemical designed to kill it
4. Answers may vary.
5. 3
6. 1
7. 2
8. 6
9. 4

10. 5
11. It contains a gene that allows it to break the chemical down into harmless substances.
12. the attempt to control pests and bacteria with chemicals
13. They have a pesticide-resistant gene.
14. evolve

SECTION: THE DIVERSITY OF LIVING THINGS

1. b
2. a
3. c
4. b
5. d
6. a
7. miniature skeletons
8. Like bacteria, fungi break down bodies and body parts of dead organisms and sometimes cause diseases.
9. Bodies and body parts of dead organisms are broken down.
10. athlete's foot
11. They give blue cheese its strong flavor.
12. Yeasts produce the gas that makes bread rise.

Map Skills

1. Organism: any individual from a population. Population: human; oak tree; blue-jay; toad; squirrel. Community: park.
2. oak tree; toad
3. biotic
4. Answers may vary.
5. Answers may vary but students should recognize that a decrease in the human population would most likely lead to an increase in the non-human population.

Quiz

SECTION: ECOSYSTEMS: EVERYTHING IS CONNECTED

- | Matching | Multiple Choice |
|----------|-----------------|
| 1. b | 6. d |
| 2. e | 7. b |
| 3. a | 8. a |
| 4. d | 9. a |
| 5. c | 10. d |