

Chapter 5 How Eco Systems Work

Study Guide

MATCHING

In the space provided, write the letter of the term or phrase that best matches the description.

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|---|--------------------------------|
| _____ 1. two types of consumers | a. photosynthesis |
| _____ 2. a diagram showing the many feeding relationships that are in an ecosystem | b. rabbit and coyote |
| _____ 3. the process in which energy from the sun is used by plants to make sugar molecules | c. fossil fuels |
| _____ 4. illustrates the loss of energy from one trophic level to the next | d. producers |
| _____ 5. organisms that get their energy by eating other organisms | e. food web |
| _____ 6. stored carbon from the remains of plants and animals that died millions of years ago | f. consumers |
| _____ 7. organisms that make their own food | g. atmospheric CO ₂ |
| _____ 8. change that occurs on an abandoned farm | h. energy pyramid |
| _____ 9. a part of the carbon cycle | i. algal bloom |
| _____ 10. results from excessive use of fertilizers | j. atmospheric N ₂ |
| _____ 11. organisms that transform atmosphereic nitrogen into usable nitrogen compounds | k. food chain |
| _____ 12. part of the nitrogen cycle | l. old-field succession |
| _____ 13. transfer of energy from one organism to another | m. nitrogen-fixing bacteria |

MULTIPLE CHOICE

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

- _____ 14. What are the first organisms to colonize any newly available area called?
a. climax species
b. ferns
c. pioneer species
d. mosses
- _____ 15. Which of the following is a producer that breaks down rock?
a. pioneer producer
b. fungal species
c. algae
d. lichen
- _____ 16. Humans are affecting the balance of the carbon cycle by
a. burning fossil fuels.
b. using carbonates at an alarming rate.
c. using fertilizers.
d. replanting the rain forests.
- _____ 17. What is a pattern of change that occurs on a surface where an ecosystem has previously existed?
a. primary succession
b. secondary succession
c. tertiary succession
d. climax community
- _____ 18. What do deep-ocean bacteria use to make their food?
a. the sun
b. hydrogen sulfide
c. carbon dioxide
d. sugar molecules
- _____ 19. Which of the following is an herbivore?
a. cow
b. lion
c. bear
d. grass
- _____ 20. Which of the following is a producer?
a. oak tree
b. raccoon
c. cockroach
d. human
- _____ 21. Which of the following is a process in the cell where glucose and oxygen produce carbon dioxide, water, and energy?
a. photosynthesis
b. cellular respiration
c. synthesis
d. decomposition
- _____ 22. Which of the following organisms would be found at the top of an energy pyramid?
a. alga
b. krill
c. leopard seal
d. killer whale
- _____ 23. Humans usually get the phosphorus that their bodies need from
a. eating plants and animals that contain phosphorus.
b. mining.
c. food additives.
d. drinking water.