

## Assessment

# Chapter Test

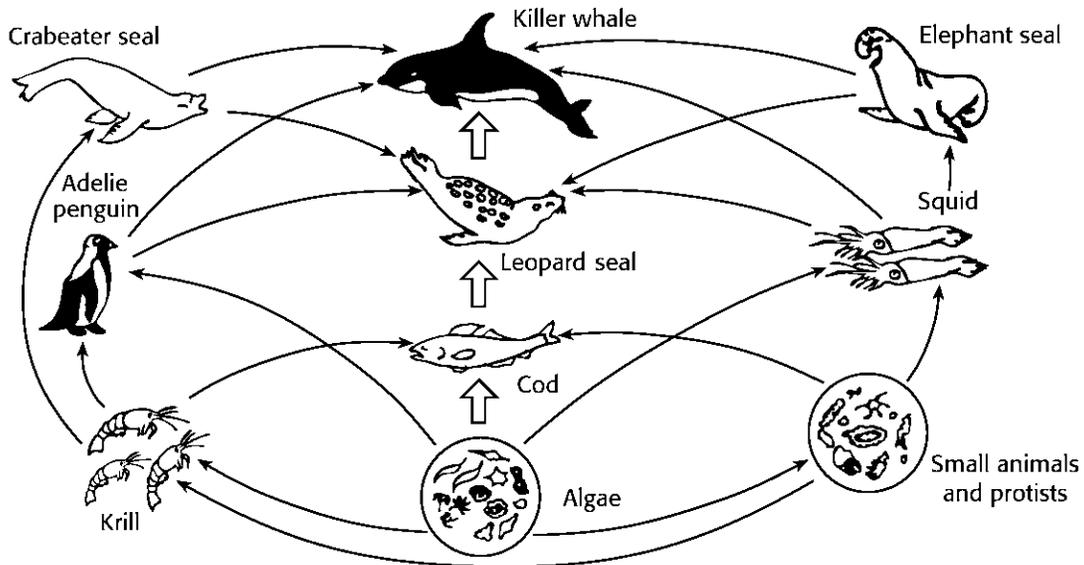
## Ecosystems

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

- \_\_\_\_\_ 1. The production of ammonia by bacteria during the decay of animal waste is called
- assimilation.
  - ammonification.
  - nitrification.
  - denitrification.
- \_\_\_\_\_ 2. Grizzly bears, snakes, and worms can be members of the same
- species.
  - trophic level.
  - ecosystem.
  - None of the above
- \_\_\_\_\_ 3. All the organisms that live in a particular place and the physical aspects of that place make up a(n)
- ecosystem.
  - habitat.
  - community.
  - food chain.
- \_\_\_\_\_ 4. The number of species living in an ecosystem is referred to as
- succession.
  - biodiversity.
  - the food chain.
  - productivity.
- \_\_\_\_\_ 5. The most important abiotic factor for the organisms in an ecosystem is
- climate.
  - sun.
  - weather.
  - water.
- \_\_\_\_\_ 6. Animals that feed on plants are in which of the following?
- first trophic level
  - second trophic level
  - third trophic level
  - fourth trophic level
- \_\_\_\_\_ 7. The number of trophic levels in an ecological pyramid
- is limitless.
  - is limited by the amount of energy that is lost at each trophic level.
  - never exceeds four.
  - never exceeds three.
- \_\_\_\_\_ 8. The movement of substances, such as water and nitrogen, in a circular path between the nonliving environment and living organisms is called
- a reservoir pathway.
  - photosynthesis.
  - cycles of matter.
  - succession.
- \_\_\_\_\_ 9. In a typical succession initiated by a retreating glacier,
- pioneer plants precede trees.
  - the first plants contribute to soil formation.
  - it takes many years for trees to be able to thrive.
  - All of the above

Chapter Test *continued*

Questions 10–12 refer to the figure below, which shows the feeding relationships in an Antarctic ecosystem.



- \_\_\_\_\_ 10. The figure above represents a
- |                 |              |
|-----------------|--------------|
| a. trophic net. | c. food net. |
| b. food chain.  | d. food web. |
- \_\_\_\_\_ 11. The algae are
- |               |                 |
|---------------|-----------------|
| a. producers. | c. parasites.   |
| b. consumers. | d. decomposers. |
- \_\_\_\_\_ 12. Leopard seals are
- |                |                |
|----------------|----------------|
| a. producers.  | c. herbivores. |
| b. carnivores. | d. omnivores.  |
- \_\_\_\_\_ 13. Organisms that obtain their energy from the organic wastes and dead bodies at all the energy levels in an ecosystem are called
- |                 |
|-----------------|
| a. decomposers. |
| b. producers.   |
| c. consumers.   |
| d. herbivores.  |
- \_\_\_\_\_ 14. An example of a material that is recycled in an ecosystem is which of the following?
- |           |            |
|-----------|------------|
| a. energy | c. carbon  |
| b. sulfur | d. ammonia |

**Chapter Test *continued***

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- \_\_\_\_\_ 15. Every time energy is transferred in an ecosystem, potential energy is lost
- a. as heat.
  - b. due to weather.
  - c. because some animals die.
  - d. when it is recycled back to producers.

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

- |                             |   |
|-----------------------------|---|
| _____ 16. transpiration     | a. release nutrients back to the environment to be recycled by other organisms              |
| _____ 17. nitrogen fixation | b. the regular replacement of one kind of community for another at a single place over time |
| _____ 18. decomposers       | c. a by-product of cellular respiration in nearly all living organisms                      |
| _____ 19. carbon dioxide    | d. process by which water is returned to the atmosphere through plants                      |
| _____ 20. succession        | e. process by which nitrogen gas is converted to ammonia by bacteria                        |

**Complete each statement by writing the correct term or phrase from the list below in the space provided.**

energy                                      food web                                      precipitation  
flooding                                      fossil fuels

21. Two key factors of climate that determine biomes are temperature and \_\_\_\_\_.
22. Wetlands filter water flowing through them and help to lessen the effects of \_\_\_\_\_.
23. The primary source of \_\_\_\_\_ for an ecosystem is the sun.
24. A food chain is only one pathway through an often very complicated \_\_\_\_\_.
25. The remains of long-dead plants and animals are the source for \_\_\_\_\_.