

Assessment

Chapter Test

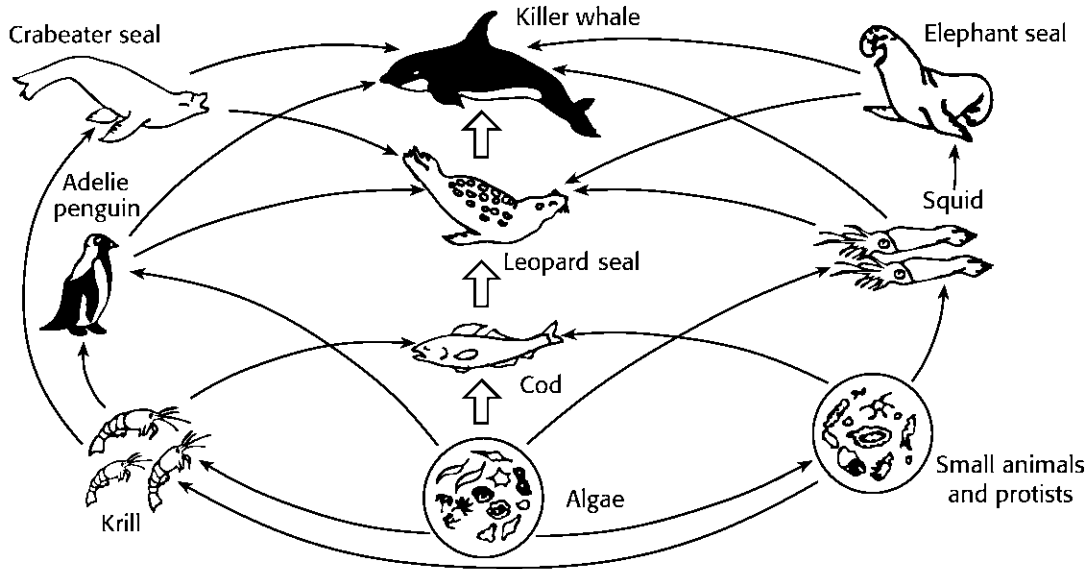
Ecosystems

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*

- _____ 15. Every time energy is transferred in an ecosystem, potential energy is lost
- as heat.
 - due to weather.
 - because some animals die.
 - 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 _____.