1. What is one-way alligators and other organisms interact?

a. Alligators dig holes.

b. Alligators escape from heat.

c. Alligators swim.

d. Fish use holes dug by alligators.

2. Which of the following statements describes a role of decomposers?

A. Decomposers use carbon dioxide and water to make sugars, which can be consumed by other organisms.

B. Decomposers recycle organic matter, making the materials available for other organisms.

C. Decomposers convert light energy into usable energy stored in glucose, which is an energy source for other organisms.

D. Decomposers fix nitrogen from the atmosphere into a form that plants can use.

3. Nitrogen fixation occurs when

A. bacteria in the soil change nitrogen gas into forms that plants can use.

B. bacteria in the soil release nitrogen gas into the atmosphere.

C. bacteria in the soil take up nitrogen from the soil.

D. bacteria in the atmosphere change nitrogen gas into forms animals can use.

4. Cycles in nature involve the recycling of matter. Which of the following processes is a part of the water cycle?

A. decomposition

B. transpiration

C. photosynthesis

D. combustion

5. Which of the following processes is primarily involved in releasing carbon into the soil?

A. combustion C. photosynthesis

B. decomposition D. respiration

6. How do most animals get the carbon they need?

a. through photosynthesis c. by eating plants

b. through respiration d. through transpiration

7. Why do organisms need nitrogen?

a. to transport nutrients c. to transport wastes

b. to build proteins and DNA d. to regulate temperature

8. Most animals get nitrogen from

a. the atmosphere. c. performing nitrogen fixation.

b. the soil. d. eating other organisms.

9. In an energy pyramid, which level has the most available energy?

a. producer level c. first level consumer

b. second level consumer d. third-level consumer

10. What does the energy pyramid show?

a. the loss of energy as it moves from organism to organism

b. the movement of organisms through the environment

c. the feeding relationship between organisms

d. how living things depend on each other for food.

11. Which of the following answer choices correctly arranges the levels of environmental organization in order of smallest to largest?

a. organism, population, community, ecosystem, biosphere

b. organism, population, community, biosphere, ecosystem

c. organism, community, population, ecosystem, biosphere

d. biosphere, ecosystem, community, population, organism

12. Which of the following are all examples of abiotic parts of an environment?

a. water, food, and a population

b. water, soil, and temperature

c. trees, hills, and rivers

d. algae, fish, and bear

13. Which organisms does the base of an energy pyramid represent?

a. producers c. herbivores

b. carnivores d. scavengers

14. 14. A community is several species of animals interacting, while a population is

a. members of one species in an area

b. the biotic and abiotic elements of an area

c. the nonliving elements of a habitat

d. a single organism

15. 15. An environmental study reporting on the way temperature, water quality, and minerals affect the animals in a salt marsh would be considering which level of organization?

a. individual organism

b. population

c. community

d. ecosystem

16. 16. Coyotes prey on prairie dogs. For the prairie dog population to survive, how many prairie dogs are needed compared to coyotes?

a. fewer prairie dogs than coyotes

b. many more prairie dogs than coyotes

c. the same number of prairie dogs and coyotes

d. there is no relationship between the number of prairie dogs and coyotes

17. 17. Condensation is part of which important cycle for life on earth?

a. energy cycle c. carbon cycle

b. water cycle d. nitrogen cycle

18. 18. How much energy is transferred as it moves up the trophic levels in an energy pyramid?

a. 100% c. 50%

b. 10% d. none