

Directed Reading A

Section: Everything Is Connected

- _____ 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.

STUDYING THE WEB OF LIFE

2. What is ecology?

3. What is the biotic part of the environment?

4. What is the abiotic part of the environment?

For each word listed, write whether it is from the biotic or abiotic part of the environment.

- _____ 5. alligator
- _____ 6. gar
- _____ 7. temperature
- _____ 8. water
- _____ 9. plants
- _____ 10. rocks

Directed Reading A *continued*

Put the five levels of environmental organization in order from smallest to largest. Write the appropriate number in the space provided.

_____ 11. population

_____ 12. biosphere

_____ 13. individual organism

_____ 14. ecosystem

_____ 15. community

16. A group of seaside sparrows competing for food, nesting space, and

mates in a salt marsh is an example of the _____

level of environmental organization.

17. List four species in the salt marsh community.

18. List three ways that species in the salt marsh community use cordgrass.

19. An ecosystem is made up of a community of organisms and the

_____ parts of the environment, such as temperature, soil, and water.

20. The ocean, the air, and all areas of Earth where life is are all parts of the

_____ level of organization.

Answer Key

Directed Reading A

SECTION: EVERYTHING IS CONNECTED

1. D
2. Answers may vary. Sample answer: Ecology is the study of interactions of living organisms and their environment.
3. all organisms that live together and interact with one another
4. nonliving factors, like water, soil, and light
5. biotic
6. biotic
7. abiotic
8. abiotic
9. biotic
10. abiotic
11. 2
12. 5
13. 1
14. 4
15. 3
16. population
17. Answers should include four of the following: gull, sparrow, snail, algae, egret, cordgrass, heron, jellyfish, shrimp, sea croaker, turtle.
18. Answers should include three of the following: eating, building nests, eating the algae growing on it, hiding in it.
19. abiotic
20. biosphere

SECTION: LIVING THINGS NEED ENERGY

1. B
2. producers, consumers, decomposers
3. producers
4. photosynthesis
5. consumers
6. herbivore
7. carnivore
8. omnivore
9. Answers may vary. Sample answer: grasshopper, prairie dog, bison
10. grasshopper, mouse
11. scavengers
12. decomposers

13. Answers may vary. Sample answer: fungi, bacteria, or other organisms that break down food
14. food chain
15. web
16. toward the one doing the eating
17. land and aquatic
18. Answers may vary. Sample answer: The grass uses most of the energy for its life processes and only stores some of the energy.
19. energy pyramid
20. There were a lot of elk, since the wolves didn't eat them, and they overgrazed grass, so it was almost gone.
21. Answers may vary. Sample answer: They think that returning the wolves will restore the natural energy flow, bring populations back into balance, and help the environment stay healthy.
22. Wolves sometimes eat cows and sheep.
23. Answers may vary. Sample answer: Elk: number reduced; Plants: more growing; Snowshoe hares and foxes: number increased

SECTION: TYPES OF INTERACTIONS

1. B
2. Answers may vary. Sample answer: The population remains about the same because most offspring do not survive.
3. limiting factor
4. Answers may vary. Sample answer: if population gets too large for the amount of food that is available
5. carrying capacity
6. Answers may vary. Sample answer: Some sort of limiting factor will cause the population to fall again.
7. predators
8. competition
9. Answers may vary. Sample answer: Elk in Yellowstone compete for food; different species of trees compete for sunlight.
10. A
11. D