

## SECTION

## 3

## Reinforcement

## Energy Flow

**Directions:** Complete the following sentences using the terms listed below.

chemosynthesis

producers

energy pyramid

consumers

photosynthesis

food web

- The production of energy-rich food molecules from chemicals is called \_\_\_\_\_.
- A diagram that shows all the possible feeding, or energy transfer, relationships in a community is called a(n) \_\_\_\_\_.
- A food chain begins with \_\_\_\_\_.
- \_\_\_\_\_ make up the second and higher steps in a food chain.
- A diagram that shows the comparative amount of energy at each feeding level is called a(n) \_\_\_\_\_.
- The production of energy-rich sugar molecules using light energy is called \_\_\_\_\_.

**Directions:** The steps in the following food chains are out of order. Put them in the correct order by numbering them using 1 as the producer level. Place the number of the step in the blank at the left.

- |                  |                   |                   |                     |
|------------------|-------------------|-------------------|---------------------|
| 7. _____ a. hawk | 8. _____ a. tiger | 9. _____ a. algae | 10. _____ a. marmot |
| _____ b. grain   | _____ b. grass    | _____ b. seal     | _____ b. grass      |
| _____ c. mouse   | _____ c. deer     | _____ c. fish     | _____ c. bear       |
| _____ d. snake   |                   | _____ d. shrimp   |                     |

**Directions:** Answer the following questions on the lines provided.

11. In the above food chains, what do all the first-step organisms have in common?

\_\_\_\_\_

Second-step organisms?

12. Explain why an energy pyramid is in the shape of a pyramid.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. Complete the compare/contrast table.

Types of Consumers	
Type of Consumer	Type of Food
	Only plants
Carnivore	
	Both plants and animals
	Dead organisms

14. Is the following sentence true or false? Decomposers return raw materials to the environment. \_\_\_\_\_

16. Circle the letter of each sentence that is true about a food web.

- a. Producers are at the top of the food web.
- b. All first-level consumers are carnivores.
- c. Second-level consumer may be carnivores or omnivores.
- d. An organism ~~any~~ <sup>may</sup> play more than one role in a food web.

17. What does an energy pyramid show?

18. Why are there usually few organisms at the top of a food web?

19. The many overlapping food chains in an ecosystem make up a(n):

20. A series of events in which one organism eats another and obtains energy is called a(n):

21. Label the producer, the first-level and second level consumers in the food chain.

