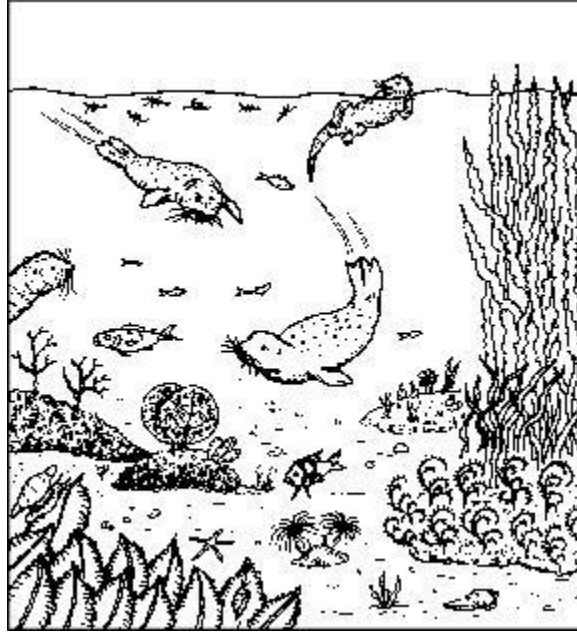

1. In the ocean scene below, which of the following are MOST LIKELY at the top of the food chain?



- A. the two forms of kelp
 - B. the seal and the otter
 - C. the fish and the snails
 - D. the plankton and algae
-

2.



How does the organism pictured above obtain energy?

- A. It converts carbon dioxide and water into food.
 - B. It uses sunlight to make its own food.
 - C. It converts minerals in the soil into food.
 - D. It consumes and recycles dead organisms and wastes in soil.
-

3.

Absent-minded Ernie has taken his field notebook to a prairie ecosystem. Ernie was supposed to have totaled up the number of producers, first-order consumers, second-order consumers, and third-order consumers present. Ernie DID record the NUMBER of species he saw along with some examples, but he accidentally erased their categories. Help Ernie classify these by line.

Line 1: _____; 1 species; mountain lion

Line 2: _____; 27 species; prairie grass

Line 3: _____; 7 species; field mice

Line 4: _____; 3 species; skunks

In this order, what did Ernie see?

- A. producers, third-order consumers, second-order consumers, first-order consumers
 - B. second-order consumers, producers, third-order consumers, first-order consumers
 - C. first-order consumers, producers, second-order consumers, third-order consumers
 - D. third-order consumers, producers, first-order consumers, second-order consumers
-

4.

When animals eat plants and other animals, they are trying to obtain the fats, proteins, and carbohydrates needed for life. What waste product do they return to the environment that is used by plants to make more of these compounds?

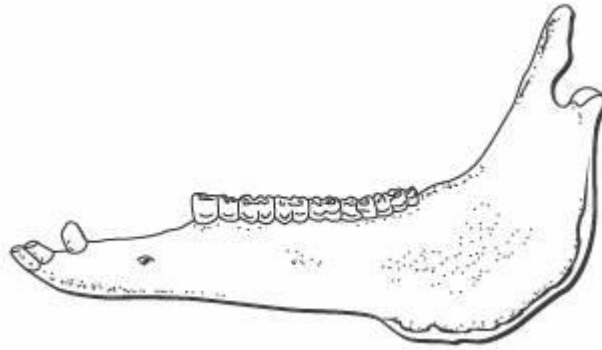
- A. water
 - B. oxygen
 - C. sugar
 - D. carbon dioxide
-

5.

Suppose that a llama is hit by a truck and dies. Where will most of the biological matter in the llama go next?

- A. to top-level predatory animals
 - B. to the soil to be used by plants
 - C. to first-order consumers that might eat the llama
 - D. to microorganisms that decompose and recycle matter
-

6.



Bethany saw this jawbone while walking in the woods. She could tell by the teeth that this animal was —

- A. a herbivore
- B. a producer
- C. a decomposer
- D. a carnivore

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7. Which of these is a decomposer?

- A. Mouse
- B. Mushroom
- C. Tree
- D. Fox

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8. The spotted turtle is common in fresh water. It eats insects, tadpoles, dead fish, and tender

aquatic plants. Which of these best describes the spotted turtle?

A. A herbivore

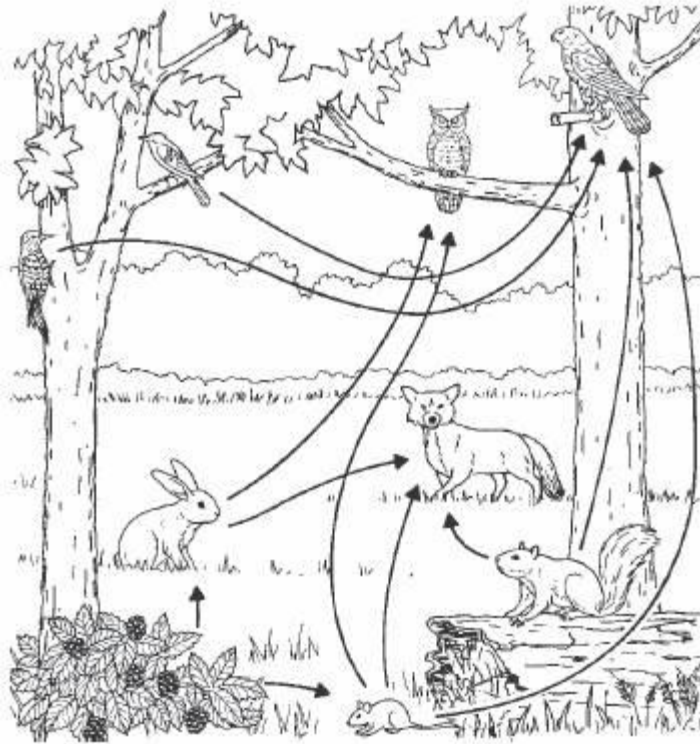
B. A carnivore

C. An omnivore

D. A decomposer

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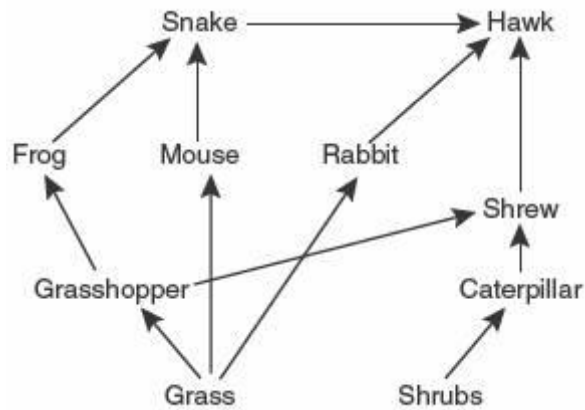
9.



In the food web shown, which of the following consumers eats only producers?

- A. Hawk
- B. Owl
- C. Fox
- D. Mouse

10.



In this food web, which organism has the greatest number of food sources?

- A. Snake
- B. Hawk
- C. Shrew
- D. Mouse

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11. Organisms that absorb nutrients from dead plants and animals are called —

- A. carnivores.
- B. decomposers.
- C. herbivores.
- D. producers.

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12. Photosynthesis is the way plants make food. Which of the following are always needed for photosynthesis?

- A. water, light, chlorophyll, carbon dioxide
 - B. water, light, flowers, oxygen
 - C. water, roots, stems, leaves
 - D. water, light, fertilizer, oxygen
-

13. The process in which green plants convert energy from the Sun into energy stored in carbon-containing molecules is called

- A. respiration.
 - B. combustion.
 - C. digestion.
 - D. photosynthesis.
-

14. A pyramid can be used to illustrate the flow of energy through a food chain. Which shows the **correct** order of the organisms in an energy pyramid?



15. During photosynthesis, green plants remove a substance from the air. The substance is

- A. water.
 - B. oxygen.
 - C. sulfur dioxide.
 - D. carbon dioxide.
-

16. The process by which producers make their own food is called

- A. diffusion.
 - B. photosynthesis.
 - C. respiration.
 - D. reproduction.
-

17. The organisms in the freshwater marsh habitat below belong to the same food web.



What source of energy fuels this entire food web?

- A. the blue heron
 - B. the dragonfly
 - C. the cattails
 - D. the Sun
-

18. Look at the food web below.



According to this food web, how do shrimp and crabs obtain energy?

- A. by eating producers
 - B. by eating consumers
 - C. by turning light into food
 - D. by releasing carbon dioxide
-


19. What is the role of the Sun in a forest ecosystem?

- A. It decomposes wastes into nutrients.
 - B. It gives chlorophyll to the producers.
 - C. It allows oxygen to be formed in the animals.
 - D. It provides the energy for all living organisms.
-

20. Albert is studying food web relationships in wetland ecosystems. He learned that hawks feed on shrews and shrews feed on cattails. What is the original source of energy for wetland ecosystems?

- A. plants
- B. insects
- C. the Sun
- D. predators

Answer Key

1. B) the seal and the otter
2. D) It consumes and recycles dead organisms and wastes in soil.
3. D) third-order consumers, producers, first-order consumers, second-order consumers
4. D) carbon dioxide
5. D) to microorganisms that decompose and recycle matter
6. A) a herbivore
7. B) Mushroom
8. C) An omnivore
9. D) Mouse
10. B) Hawk
11. B) decomposers.
12. A) water, light, chlorophyll, carbon dioxide
13. D) photosynthesis.
14. B) 
15. D) carbon dioxide.
16. B) photosynthesis.
17. D) the Sun
18. A) by eating producers

19. D) It provides the energy for all living organisms.

20. C) the Sun
