

Chapter 2 Quiz

Part A: Matching

Match each term with its definition.

- | | |
|---------------------------|---|
| _____ 1. habitat | (a) consumer that eats both producers and consumers |
| _____ 2. biosphere | (b) breakdown of biotic matter to simple nutrient molecules |
| _____ 3. autotroph | (c) position in a food chain |
| _____ 4. heterotroph | (d) region in which an organism lives |
| _____ 5. primary consumer | (e) organism that lives in or on another, from which it obtains nutrients |
| _____ 6. omnivore | (f) organism that eats only producers |
| _____ 7. biodegradation | (g) organism that makes its own food |
| _____ 8. parasite | (h) total area of Earth where organisms are found |
| _____ 9. trophic level | (i) organism that obtains its nutrients from other organisms |

Part B: Multiple Choice

Circle the letter beside the answer that best answers the question.

10. Which of the following is an abiotic factor of an ecosystem and a limiting factor for Canada geese?
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|----------|------------|
| A. light | C. grasses |
| B. water | D. wolves |
11. Which of the following is an example of a population in a kelp bed ecosystem?
- an otter
 - a starfish and its prey
 - all the sea urchins in the ecosystem
 - the organisms, water, and rocks in the ecosystem
12. Which of the following is NOT a source of energy for detritivores?
- | | |
|--------------|---------------|
| A. water | C. producers |
| B. predators | D. carnivores |
13. Which of the following is a source of energy for zooplankton?
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|-----------|-------------------|
| A. algae | C. ocean water |
| B. sulfur | D. dead organisms |
14. How is commensalism like parasitism?
- | | |
|----------------------------------|---|
| A. Only one species benefits. | C. One of the organisms is an herbivore. |
| B. One of the species is harmed. | D. Only one of the organisms is a predator. |

Chapter 2 Quiz (continued)

15. What kind of relationship exists between algae and fungi in lichen?
- A. mutualism
B. parasite–host
C. predator–prey
D. commensalism
16. What is one way a detritivore differs from an herbivore?
- A. Herbivores are plants, and detritivores are animals.
B. Herbivores are producers, and detritivores are consumers.
C. Herbivores eat only producers, and detritivores eat both producers and consumers.
D. Herbivores are the base of a food chain, and detritivores are the top of a food chain.
17. In which ecological pyramid are the trophic levels measured in kilograms?
- A. food
B. energy
C. biomass
D. numbers

Part C: Diagram Completion

18. The diagram below shows a food chain. Identify the ecological role of each organism using the terms “autotroph,” “detritivore,” “herbivore,” and “carnivore.” Write the ecological role of each organism on the line below the organism.



19. Label the pyramid of energy below with the terms “first trophic level,” “fourth trophic level,” “primary consumers,” “producers,” “second trophic level,” “secondary consumers,” “tertiary consumers,” and “third trophic level” to show the relationships between trophic levels and between organisms.

