

## Q1W2-Bio-G10- Test

### Multiple Choice

Identify the choice that best completes the statement or answers the question.

- \_\_\_ 1. Ecology is the study of relationships among —  
a. living things only. c. nonliving things only.  
b. living and nonliving things. d. None of the above
- \_\_\_ 2. The portion of Earth that supports the existence of living things is called the —  
a. ecosystem. c. biosphere.  
b. habitat. d. niche.
- \_\_\_ 3. Which of the following is a biotic factor that might affect the life of a water-dwelling organism?  
a. Temperature of the water c. Pollutants in water  
b. Speed of water current d. Bacterial population in water
- \_\_\_ 4. Which of the following is NOT consumed by fungal decomposers?  
a. First-order heterotrophs c. Producers  
b. Third-order heterotrophs d. None of the above
- \_\_\_ 5. Which ecological pyramid best explains why food chains are typically only three or four links long?  
a. Pyramid of biomass c. Pyramid of numbers  
b. Pyramid of energy d. None of the above
- \_\_\_ 6. How does the amount of water on Earth change as a result of the water cycle?  
a. It always increases c. It remains constant  
b. It alternately increases and decreases d. It always decreases
- \_\_\_ 7. Which of the following things does NOT allow plants to obtain atmospheric nitrogen in a more usable form?  
a. Photosynthesis c. Symbiotic bacteria  
b. Lightning d. Chemical fertilizers
- \_\_\_ 8. Carbon dioxide in the atmosphere enters the biotic parts of the biosphere through \_\_\_\_\_.  
a. burning of forests c. combustion of fossil fuels  
b. photosynthesis d. all of these
- \_\_\_ 9. Some birds are known as honey guides because they may be followed by humans to wild beehives. When the humans take honey from the hives, the birds are able to feast on the honey and bees, too. This type of relationship can best be described as \_\_\_\_\_.  
a. parasitism c. mutualism  
b. commensalism d. symbiosis
- \_\_\_ 10. Sea stars live in saltwater ecosystems. Some species live in shallow tidal pools, while others live in the deepest parts of the oceans. This is a description of the \_\_\_\_\_ of sea stars.  
a. habitat c. niche  
b. community d. none of these
- \_\_\_ 11. Cougars are predators that often eat weakened or diseased animals. This is a description of the \_\_\_\_\_ of cougars.  
a. habitat c. niche  
b. community d. none of these
- \_\_\_ 12. An ecologist who studies how several species in an area interact is interested in the biological organization called a(n) \_\_\_\_\_.  
a. organism c. community  
b. population d. ecosystem



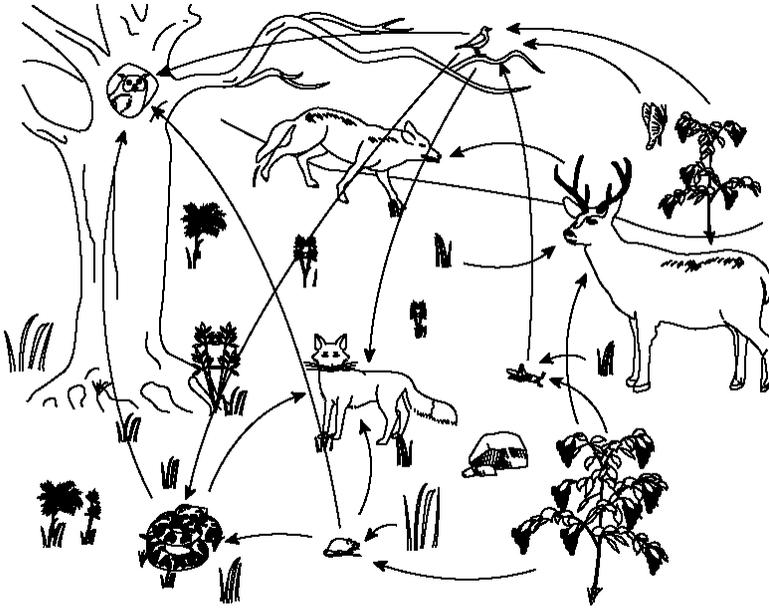


Figure 2-5

- a. mouse
- b. butterfly
- c. rock
- d. tree

19. The group of animals in Figure 2-6 is an example of what?

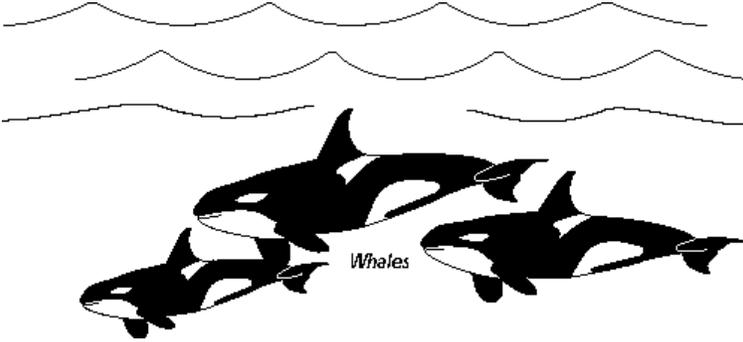


Figure 2-6

- a. community
- b. ecosystem
- c. population
- d. biosphere

20. In the energy pyramid shown in Figure 2-7, which level has the smallest number of organisms?

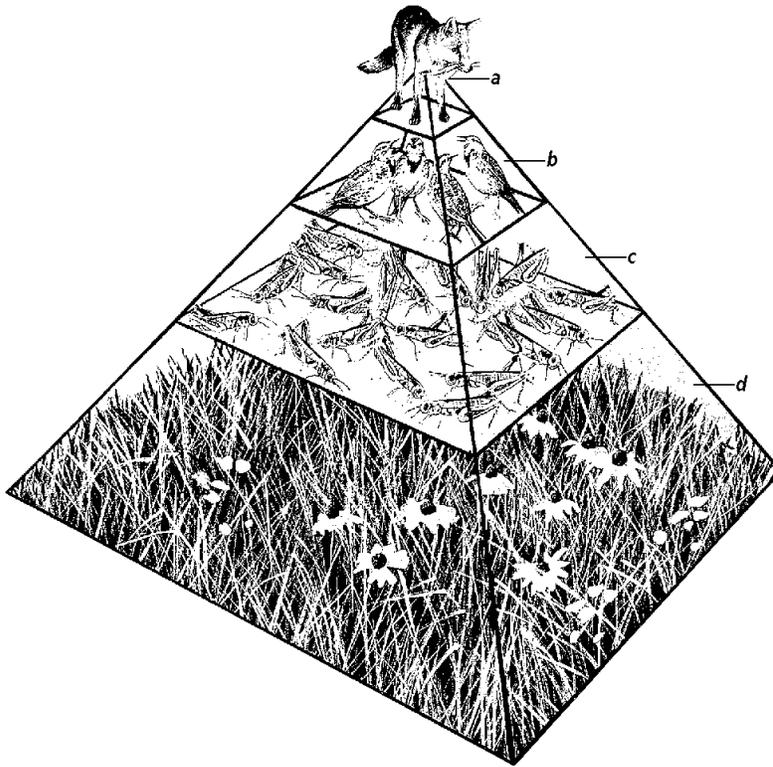


Figure 2-7

- a. fox
- b. birds
- c. grasshoppers
- d. grass

\_\_\_ 21. The organisms growing on the log in Figure 2-8 are \_\_\_?

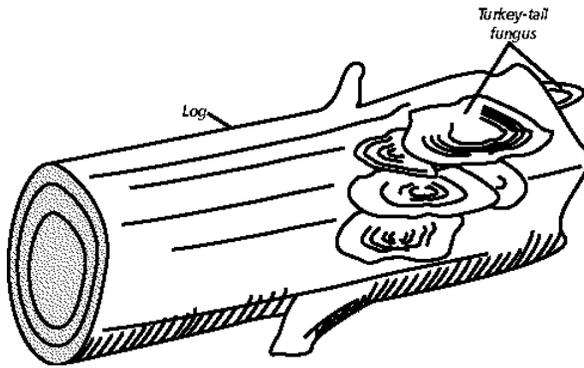
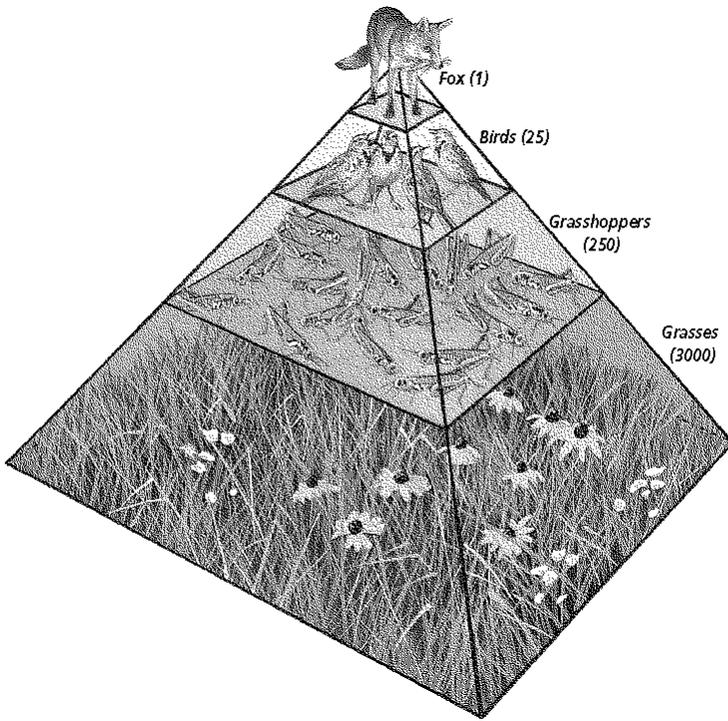


Figure 2-8

- a. producers
- b. autotrophs
- c. carnivores
- d. decomposers

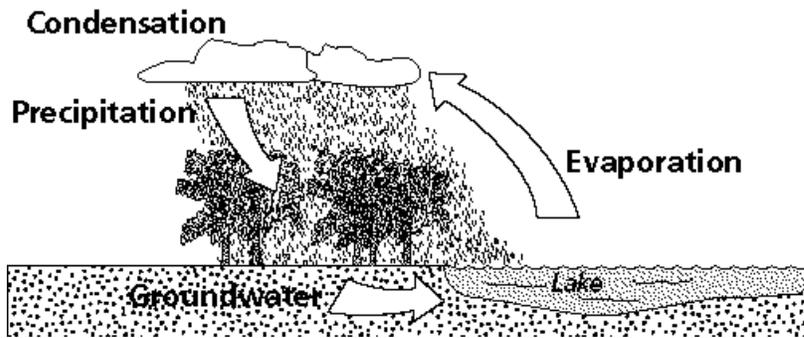
\_\_\_ 22. Which organism shown in the pyramid shown in Figure 2-9 receives the highest percentage of energy from the sun?



**Figure 2-9**

- a. fox
- b. birds
- c. grasshoppers
- d. grass

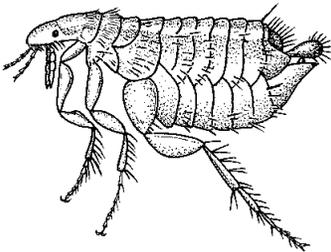
\_\_\_ 23. What type of cycle is depicted in Figure 2-10?



**Figure 2-10**

- a. carbon
- b. water
- c. phosphorus
- d. nitrogen

\_\_\_ 24. The organism shown in Figure 2-12 is involved in which type of symbiosis?



**Figure 2-12**

- a. mutualism
- b. commensalism
- c. parasitism
- d. predatorism

**Matching**

*Match each item with the correct statement below.*

- a. mutualism
- b. biosphere
- c. ecology
- d. biological community
- e. decomposer
- f. parasitism
- g. habitat
- h. food web
- i. food chain
- j. commensalism
- k. scavenger
- l. heterotroph
- m. trophic level
- n. autotroph

- \_\_\_ 25. study of how living things relate to each other and to their environment
- \_\_\_ 26. relationship between organisms in which both organisms benefit
- \_\_\_ 27. relationship between organisms in which one organism benefits and the other is neither harmed nor benefited
- \_\_\_ 28. layer of Earth that supports life
- \_\_\_ 29. place where an organism spends its life
- \_\_\_ 30. breaks down dead organisms