

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.
 - b. living and nonliving things.
 - c. nonliving things only.
 - d. None of the above
- ___ 2. The portion of Earth that supports the existence of living things is called the —
 - a. ecosystem.
 - b. habitat.
 - c. biosphere.
 - 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
 - b. Speed of water current
 - c. Pollutants in water
 - d. Bacterial population in water
- ___ 4. Which of the following is NOT consumed by fungal decomposers?
 - a. First-order heterotrophs
 - b. Third-order heterotrophs
 - c. Producers
 - 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
 - b. Pyramid of energy
 - c. Pyramid of numbers
 - 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
 - b. It alternately increases and decreases
 - c. It remains constant
 - 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
 - b. Lightning
 - c. Symbiotic bacteria
 - d. Chemical fertilizers
- ___ 8. Carbon dioxide in the atmosphere enters the biotic parts of the biosphere through _____.
 - a. burning of forests
 - b. photosynthesis
 - c. combustion of fossil fuels
 - 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
 - b. commensalism
 - c. mutualism
 - 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
 - b. community
 - c. niche
 - 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
 - b. community
 - c. niche
 - 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
 - b. population
 - c. community
 - d. ecosystem

- a. core
b. mantle
c. upper mantle
d. earth's crust
- ____ 18. Identify the abiotic factor labeled in the ecosystem shown in Figure 2-5.

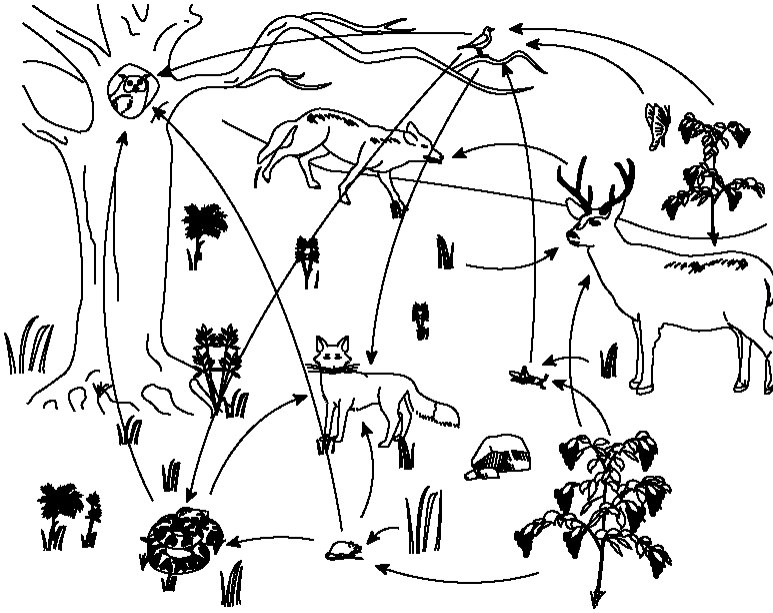


Figure 2-5

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

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

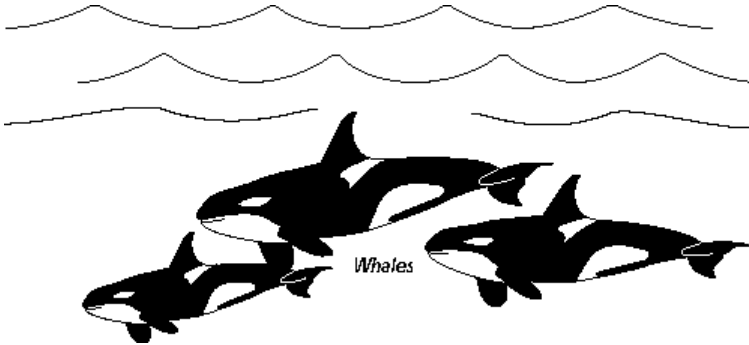


Figure 2-6

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

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

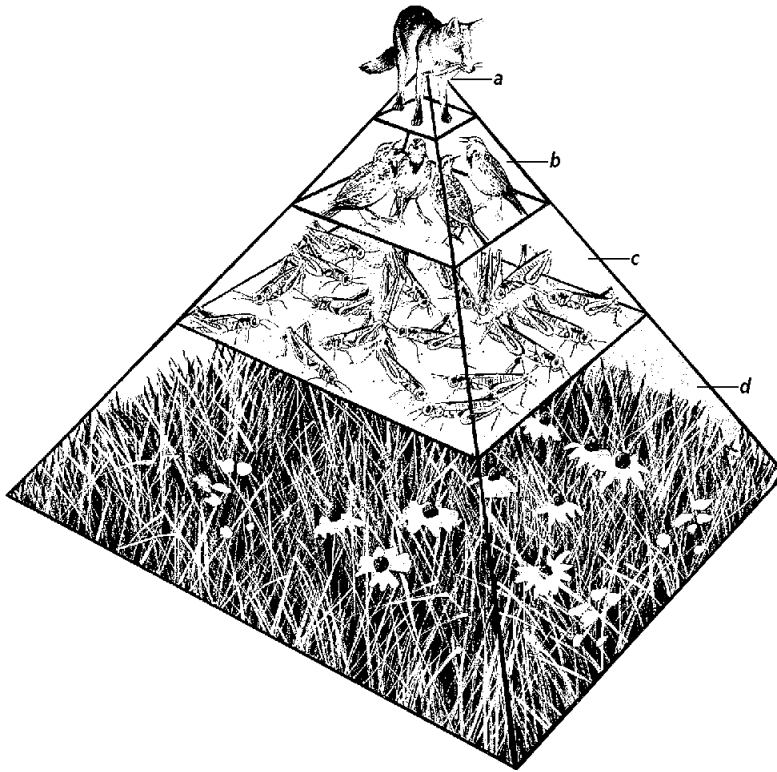


Figure 2-7

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

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

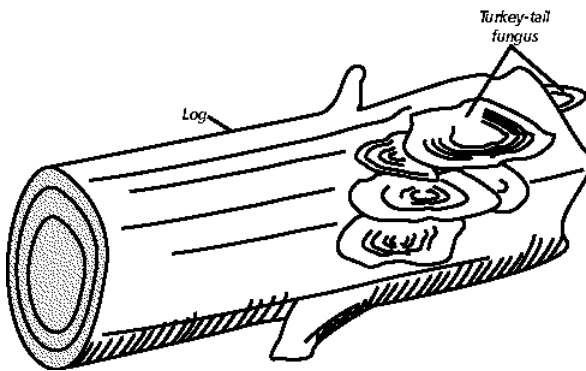


Figure 2-8

- 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?

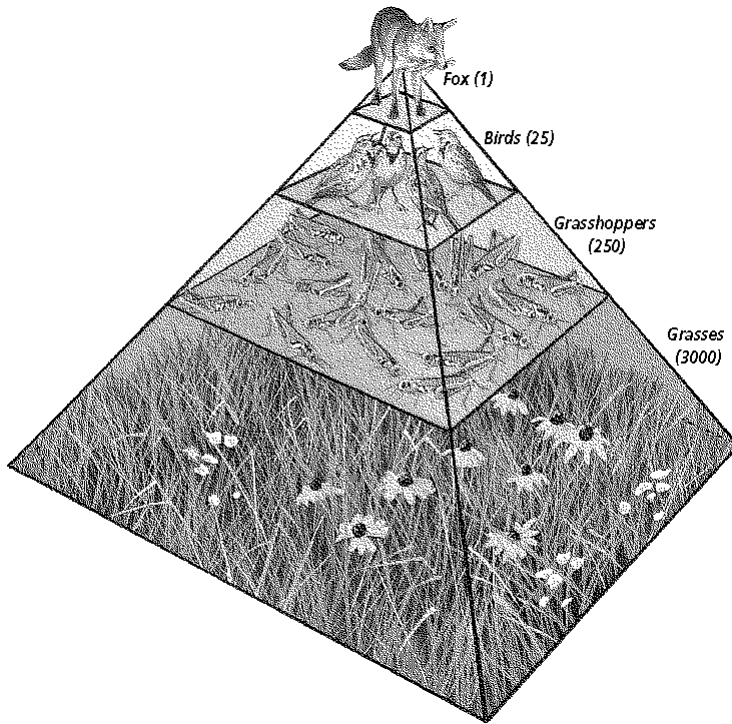


Figure 2-9

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

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

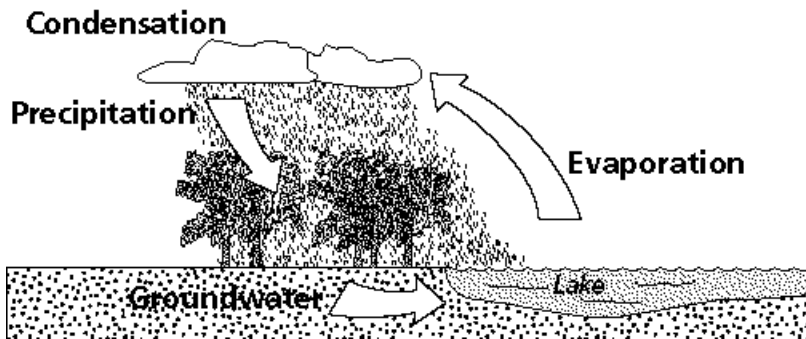


Figure 2-10

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

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

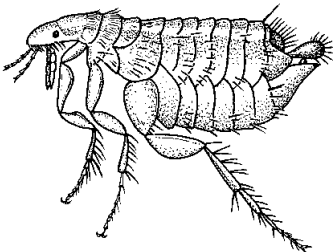


Figure 2-12

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

Matching

Match each item with the correct statement below.

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