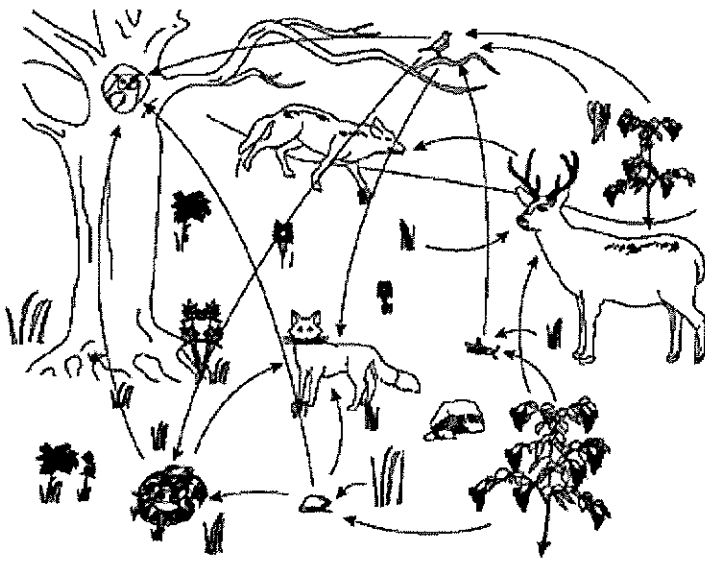


## Biology Exam B MP - 1

- \_\_\_\_\_ 1. Autotroph                      A. simple model for showing how matter and energy move through an ecosystem.
- \_\_\_\_\_ 2. Commensalism                B. relationship between species in which both benefit
- \_\_\_\_\_ 3. Decomposer                    C. network of interconnected food chains
- \_\_\_\_\_ 4. Food Chain                    D. manufactures nutrients using energy from the sun or from chemical compounds
- \_\_\_\_\_ 5. Food Web                      E. relationship between species in which one species benefits and the other is neither harmed nor benefited
- \_\_\_\_\_ 6. Heterotrophy                 F. simple model for showing how matter and energy move through an ecosystem
- \_\_\_\_\_ 7. Parasitism                    G. eats dead organisms
- \_\_\_\_\_ 8. Scavenger                    H. obtains energy by feeding on other organisms
- \_\_\_\_\_ 9. Mutualism                    I. relationship between species in which one species benefits at the expense of another
- \_\_\_\_\_ 10. Symbiosis                    J. permanent close association between two or more organisms of different species

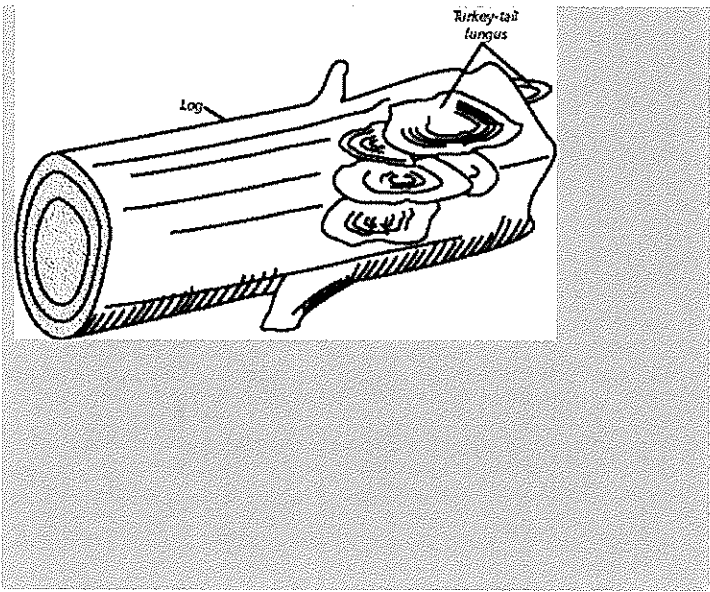
**MULTIPLE CHOICE****Directions Circle the correct answer.**

1. An elk eats grass. A grizzly bear eats the elk. This is an example of a \_\_\_\_\_.  
C. pyramid of numbers                      C. food web  
D. commensal relationship                D. food chain
  
2. Biotic factors in a wetland community might include \_\_\_\_\_.  
C. water    C. temperature  
D. crayfish                                         D. soil type
  
3. As energy flows through an ecosystem, energy \_\_\_\_\_ at each trophic level.  
C. remains the same                              C. decreases then increases  
D. increases                                         D. decreases
  
4. Which of the following would be abiotic factors for a polar bear?  
C. extreme cold, floating ice                C. large body size  
D. eating only live prey                        D. paws with thick hair
  
5. Which of the following would decrease the amount of carbon dioxide in the air?  
C. A maple tree growing                        C. a person driving a car to work  
D. A dog running                                 D. a forest burning
  
6. Which of the following is true concerning the flow of energy and matter in an ecosystem?  
E. Both energy and matter are recycled and used again  
F. Matter is recycled and used again, energy is lost  
G. Energy is recycled and used again, matter is lost  
H. Neither energy nor matter are recycled and used again



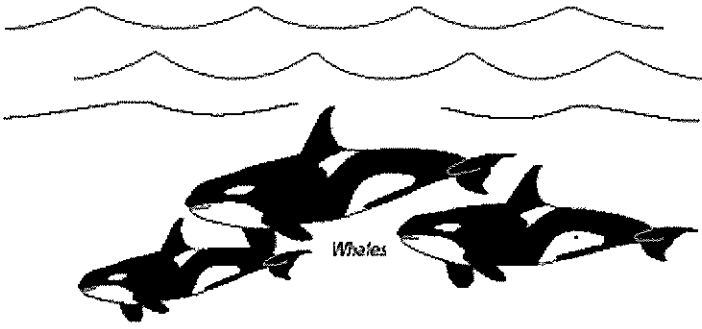
7. Identify the abiotic factor labeled in the ecosystem shown in Figure 2-5.

- A. butterfly
- B. rock
- C. mouse
- D. tree



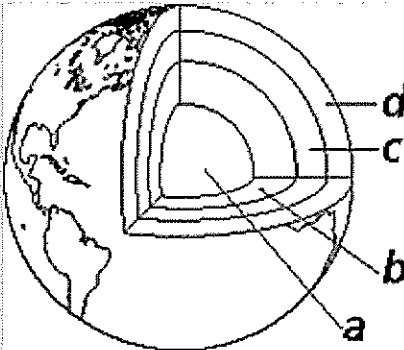
8. The organisms growing on the log in Figure 2-8 are \_\_\_\_?

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



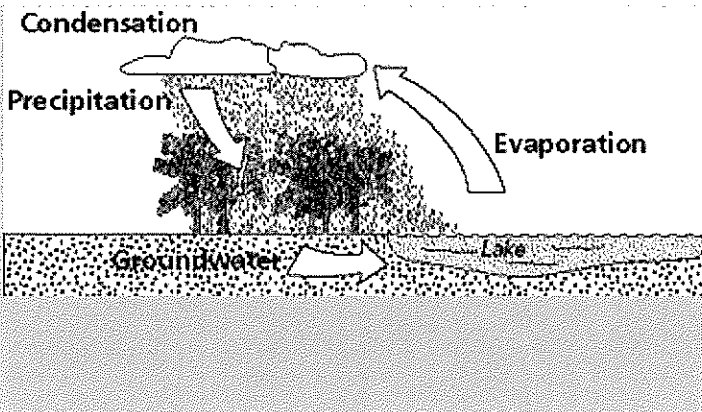
9. The group of animals in Figure 2-6 is an example of what?

- A. ecosystem
- B. population
- C. community
- D. biosphere



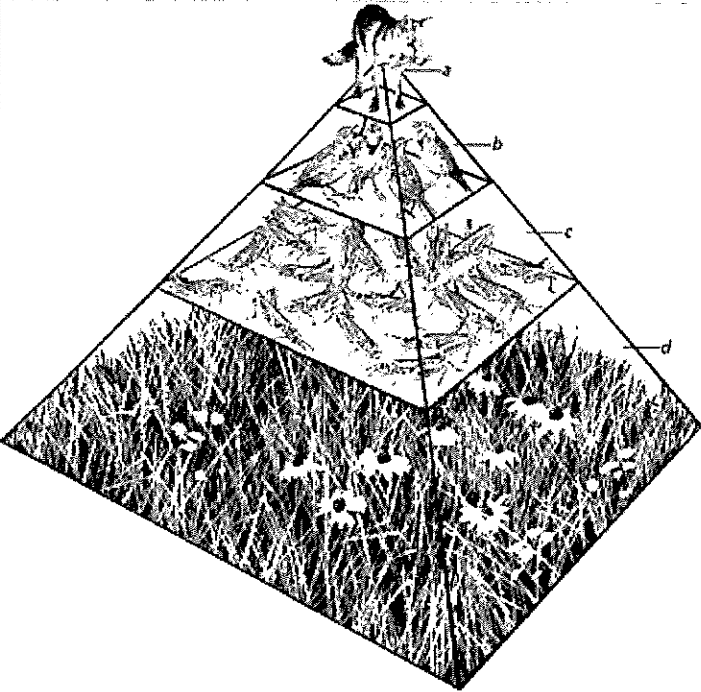
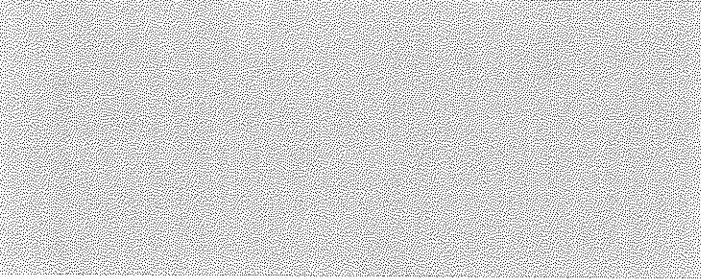
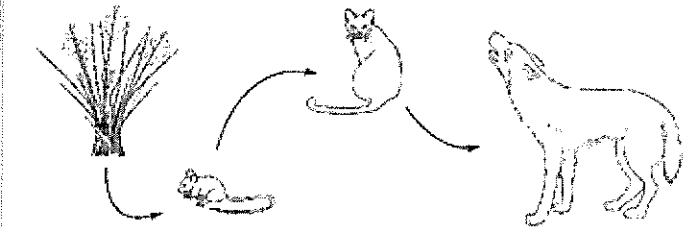
10. Where is the biosphere in Figure 2-4?

- A. Earth's crust
- B. core
- C. upper mantle
- D. mantle



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

- E. carbon
- F. phosphorus
- G. nitrogen
- H. water



12. What type of ecosystem is shown in Figure 2-11?

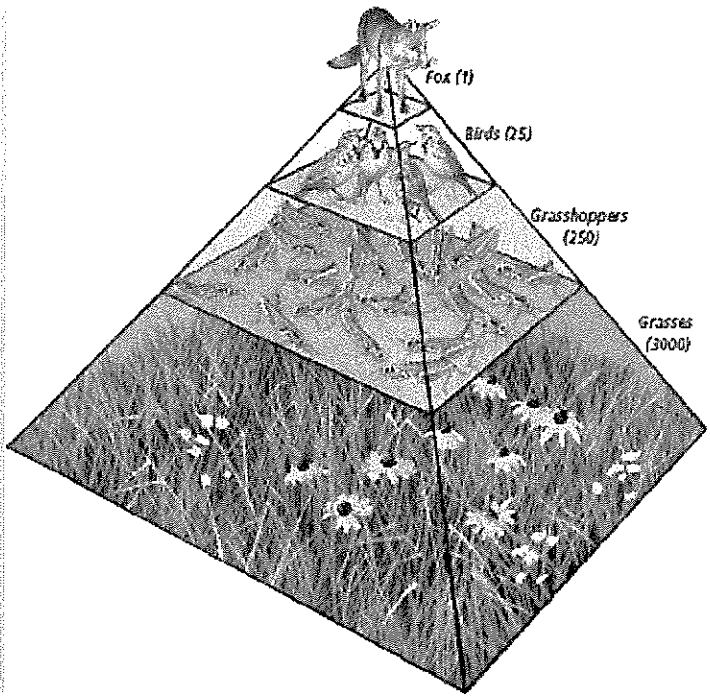
- A. population
- B. terrestrial
- C. aquatic
- D. abiotic

13. Referring to Figure 2-1, suppose 10 000 units of energy are available at the level of the grasses. What is the total number of energy units lost by the time energy reaches the coyote?

- A. 9990 units
- B. 990 units
- C. 9900 units
- D. 90 units

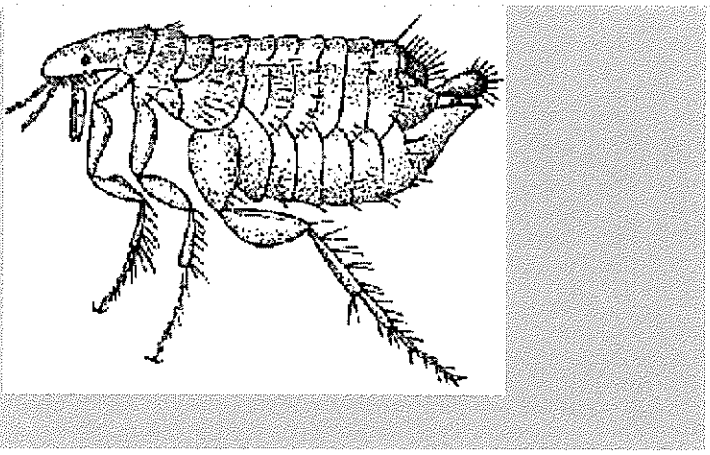
14. In the energy pyramid shown in Figure 2-7, which level has the smallest number of organisms?

- A. birds
- B. fox
- C. grasshoppers
- D. grass



15. Which organism shown in the pyramid receives the highest percentage of energy from the Sun?

- A. grass
- B. birds
- C. fox
- D. grasshoppers



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

- A. commensalism
- B. parasitism
- C. predatorism
- D. mutualism

17. Animals lose water when the \_\_\_\_\_.

- C. breathe in
- D. urinate
- C. breathe out
- D. both b and c

18. Phosphorus in the soil comes from \_\_\_\_\_.

- C. rocks
- D. decaying organisms
- C. the air
- D. both a and b

19. Energy that is lost at each trophic level of an ecosystem is replenished by \_\_\_\_\_.

- C. heat
- D. nutrients
- C. sunlight
- D. organisms

20. Plants lose water to the air through \_\_\_\_\_.

- C. condensation
- D. photosynthesis
- C. their roots
- D. evaporation

**SHORT ANSWERS**

**Directions: Answer all questions using complete sentences. Spelling and grammar count.**

1. What is a producer?

2. Which organism breaks down and releases nutrients from other organisms?

3. What is a scavenger?

4. Name an animal or organism at each level.

Decomposer \_\_\_\_\_

Herbivore \_\_\_\_\_

Carnivore \_\_\_\_\_

Omnivore \_\_\_\_\_

5. The air in our atmosphere contains about 78% of what element?

**ESSAY**

**Directions Answer the questions using complete sentences Spelling and grammar count!**

What element is considered the building block of all the molecules of life? Explain.

---

---

---

---

---

---

---

---

---

---