

Biology Exam A 1st MP

MATCHING

Directions: Place the letter on the line next to the word that matches the definition.

- | | |
|------------------------|---|
| _____ 1. Autotroph | A. portion of Earth that supports life |
| _____ 2. Commensalism | B. study of interactions among organisms and their environments |
| _____ 3. Decomposer | C. collection of interacting populations |
| _____ 4. Food Chain | D. relationship between species in which one species benefits and the other is neither harmed nor benefited |
| _____ 5. Food Web | E. step in the passage of energy and matter through an ecosystem |
| _____ 6. Heterotrophy | F. place where an organism lives out its life |
| _____ 7. Parasitism | G. manufactures nutrients using energy from the sun or from chemical compounds |
| _____ 8. Scavenger | H. relationship between species in which both species benefit |
| _____ 9. Trophic level | I. tiny organisms that break down and absorb nutrients from dead organisms |
| _____ 10. Habitat | J. permanent close association between two or more organisms of different species |
| _____ 11. Community | K. network of interconnected food chains |
| _____ 12. Biosphere | L. relationship between species in which one species benefits at the expense of another |
| _____ 13. Ecology | M. obtains energy by feeding on other organisms |
| _____ 14. Mutualism | N. eats dead organisms |
| _____ 15. Symbiosis | O. simple model for showing how matter and energy move through an ecosystem |

MULTIPLE CHOICE

Write the correct answer in the space provided.

_____ 1. Animals lose water when the _____.

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

_____ 2. Phosphorus in the soil comes from _____.

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

_____ 3. Energy that is lost at each trophic level of an ecosystem is replenished by _____.

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

_____ 4. Plants lose water to the air through _____.

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

_____ 5. The water in the atmosphere is returned to Earth by _____.

- A. precipitation
- B. evaporation
- C. photosynthesis
- D. decomposition

_____ 6. Fertilizers provide plants with _____.

- A. nitrogen
- B. carbon
- C. water
- D. oxygen

_____ 7. Plants use nitrogen to make _____.

- A. carbohydrates
- B. nitrogen gas
- C. proteins
- D. both b and c

_____ 8. Organisms that use the sun's energy to make food are called _____.

- A. herbivores
- B. animals
- C. autotrophs
- D. heterotrophs

_____ 9. Which organism is a carnivore?

- A. human
- B. rabbit
- C. lion
- D. opossum

_____ 10. An elk eats grass. A grizzly bear eats the elk. This is an example of a _____.

- A. pyramid of numbers
- B. commensal relationship
- C. food web
- D. food chain

_____ 11. Biotic factors in a wetland community might include _____.

- A. water
- B. crayfish
- C. temperature
- D. soil type

_____ 12. As energy flows through an ecosystem, energy _____ at each trophic level.

- A. remains the same
- B. increases
- C. decreases then increases
- D. decreases

_____ 13. Which of the following would be abiotic factors for a polar bear?

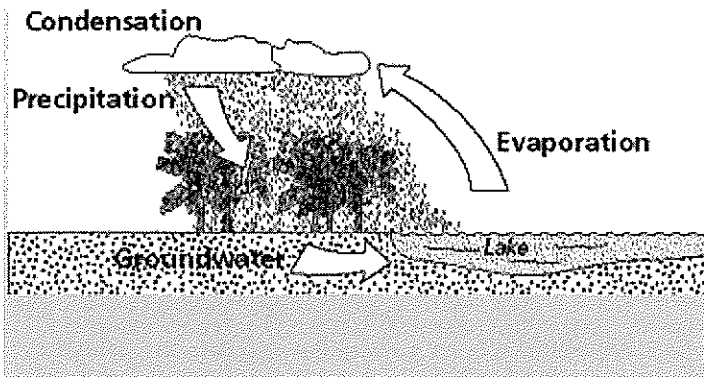
- A. extreme cold, floating ice
- B. eating only live prey
- C. large body size
- D. paws with thick hair

_____ 14. Which of the following would decrease the amount of carbon dioxide in the air?

- A. A maple tree growing
- B. A dog running
- C. a person driving a car to work
- D. a forest burning

_____ 15. Which of the following is true concerning the flow of energy and matter in an ecosystem?

- A. Both energy and matter are recycled and used again
- B. Matter is recycled and used again, energy is lost
- C. Energy is recycled and used again, matter is lost
- D. Neither energy nor matter are recycled and used again



16. What type of cycle is depicted in this picture?

- A. carbon
- B. phosphorus
- C. nitrogen
- D. water

FILL IN

Directions: Use each term below once to complete the passage. Use each word only once.

- | | | | |
|-----------|--------------|------------|-----------------|
| ecology | humans | atmosphere | abiotic factors |
| soil | nonliving | biosphere | biotic factors |
| organisms | environments | | |

Living organisms in our world are connected to other _____ in a variety of ways. The branch of biology called _____ is the scientific study of interactions among organisms and their _____, including relationship between living and _____ things.

All living things on Earth can be found in the _____, the portion of Earth that supports life. It extends from high in the _____ to the bottom of the oceans. Many different environments can be found in the biosphere. All living things found in an environment are called _____. Nonliving parts of an environment are called _____. For example, whales, trees and _____ are biotic factors. Ocean currents, temperature and _____ are abiotic factors.

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. Draw a food chain. (You can use just words)

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.
