

Ecosystems - Multiple Choice Worksheet

Name: _____

Date: _____

Instructions: Choose the correct answer from the options provided.

1. **What is an ecosystem?**
 - a) A group of similar organisms living together
 - b) A community of living organisms interacting with their environment
 - c) A single species interacting with the environment
 - d) A population of organisms in one area
2. **Which of the following is a biotic factor in an ecosystem?**
 - a) Sunlight
 - b) Water
 - c) Plants
 - d) Rocks
3. **Which term describes non-living components of an ecosystem?**
 - a) Biotic
 - b) Abiotic
 - c) Symbiotic
 - d) Heterotrophic
4. **Which of the following is an example of an abiotic factor?**
 - a) Bacteria
 - b) Temperature
 - c) Trees
 - d) Animals
5. **What is the primary source of energy for most ecosystems?**
 - a) Water
 - b) Soil
 - c) The sun
 - d) Wind
6. **Which organisms are considered producers in an ecosystem?**
 - a) Herbivores
 - b) Decomposers
 - c) Plants
 - d) Carnivores
7. **Which of the following is a consumer in an ecosystem?**
 - a) Tree
 - b) Lion
 - c) Grass
 - d) Sunlight
8. **What role do decomposers play in an ecosystem?**
 - a) They consume producers
 - b) They convert solar energy into chemical energy
 - c) They break down dead organisms and recycle nutrients
 - d) They capture sunlight for photosynthesis
9. **Which of the following best describes a food chain?**
 - a) A map showing the movement of organisms in an ecosystem
 - b) A sequence showing how energy is transferred from one organism to another
 - c) A chart of the population of species in an ecosystem
 - d) A process by which plants make their food
10. **What is biodiversity?**
 - a) The variety of living organisms in an ecosystem
 - b) The amount of energy stored in an ecosystem
 - c) The relationship between predators and prey
 - d) The number of consumers in a food chain
11. **Which of the following is an example of a primary consumer?**
 - a) Eagle
 - b) Grasshopper
 - c) Grass
 - d) Fungi
12. **What is a habitat?**
 - a) The role of an organism in an ecosystem
 - b) The place where an organism lives
 - c) A group of organisms of the same species
 - d) The process by which organisms interact
13. **In an energy pyramid, which level contains the most energy?**
 - a) Tertiary consumers
 - b) Secondary consumers
 - c) Primary consumers
 - d) Producers

14. **Which of the following is a limiting factor in an ecosystem?**
- a) Space
 - b) Sunlight
 - c) Water
 - d) All of the above
15. **What term describes the role an organism plays in its ecosystem?**
- a) Habitat
 - b) Niche
 - c) Food chain
 - d) Trophic level
16. **What is the effect of a keystone species on an ecosystem?**
- a) It has little impact on other organisms
 - b) It helps regulate the population and structure of the ecosystem
 - c) It is always a top predator
 - d) It only affects the producers in the ecosystem
17. **What process do producers use to create energy?**
- a) Respiration
 - b) Decomposition
 - c) Photosynthesis
 - d) Predation
18. **What happens to energy as it moves up the trophic levels in an ecosystem?**
- a) It increases
 - b) It decreases
 - c) It remains the same
 - d) It cycles back to the producers
19. **What is the relationship called when two organisms live closely together and both benefit?**
- a) Parasitism
 - b) Mutualism
 - c) Commensalism
 - d) Competition
20. **Which of the following is an example of a freshwater ecosystem?**
- a) Ocean
 - b) Coral reef
 - c) Lake
 - d) Desert

Answer Key

1. b) A community of living organisms interacting with their environment
2. c) Plants
3. b) Abiotic
4. b) Temperature
5. c) The sun
6. c) Plants
7. b) Lion
8. c) They break down dead organisms and recycle nutrients
9. b) A sequence showing how energy is transferred from one organism to another
10. a) The variety of living organisms in an ecosystem
11. b) Grasshopper
12. b) The place where an organism lives
13. d) Producers
14. d) All of the above
15. b) Niche
16. b) It helps regulate the population and structure of the ecosystem
17. c) Photosynthesis
18. b) It decreases
19. b) Mutualism
20. c) Lake