# Biosphere Worksheet

**Instructions for Students:
Choose the correct answer for each question. Circle the letter of your choice.**

**Questions**

1. What is the biosphere?
a) The layer of Earth’s crust
b) The part of Earth where life exists
c) The atmosphere above the Earth
d) The Earth’s water systems
2. Which component is NOT part of the biosphere?
a) Oceans
b) Soil
c) Rocks
d) Sunlight
3. What is the role of producers in the biosphere?
a) Decomposing organic material
b) Consuming energy from other organisms
c) Producing oxygen through photosynthesis
d) Providing shelter for animals
4. Which of the following is an abiotic factor in the biosphere?
a) Grass
b) Oxygen
c) Fish
d) Birds
5. The biosphere interacts with which of the following spheres?
a) Atmosphere
b) Lithosphere
c) Hydrosphere
d) All of the above
6. Which human activity has the most impact on the biosphere?
a) Reading books
b) Recycling
c) Deforestation
d) Riding bicycles
7. What term describes organisms that break down dead material?
a) Producers
b) Decomposers
c) Consumers
d) Pollinators
8. Which ecosystem is part of the biosphere?
a) Desert
b) Tropical rainforest
c) Coral reef
d) All of the above
9. What is the primary source of energy for the biosphere?
a) Wind
b) Solar radiation
c) Fossil fuels
d) Geothermal energy
10. What do we call the balance between organisms and their environment?
a) Biodiversity
b) Ecosystem stability
c) Ecological equilibrium
d) Sustainability
11. Why is biodiversity important in the biosphere?
a) It provides ecosystem resilience
b) It reduces climate change
c) It eliminates competition
d) It speeds up natural processes
12. What is a biome?
a) A single species living in one area
b) A large area with similar climate, plants, and animals
c) The study of ecosystems
d) The smallest unit of the biosphere
13. Which biome is characterized by very low temperatures and permafrost?
a) Tundra
b) Desert
c) Tropical rainforest
d) Grassland
14. What is the main cause of global warming affecting the biosphere?
a) Increased solar activity
b) Deforestation and burning fossil fuels
c) Natural volcanic eruptions
d) Plate tectonics
15. What percentage of Earth is covered by the biosphere?
a) 10%
b) 50%
c) Nearly all of Earth’s surface
d) Less than 1%
16. What is the main function of the ozone layer for the biosphere?
a) Absorbing CO2
b) Protecting against UV radiation
c) Regulating ocean currents
d) Supporting plant growth
17. Which of the following is an example of habitat destruction?
a) Building a dam
b) Reforestation
c) Crop rotation
d) Installing solar panels
18. What is an example of an invasive species?
a) A native tree
b) A species introduced to a new habitat
c) A species becoming extinct
d) A predator controlling its prey
19. What does the term "carrying capacity" mean in the biosphere?
a) The maximum weight the Earth can handle
b) The number of organisms an ecosystem can support
c) The total energy produced by plants
d) The water-holding capacity of soil
20. How does climate change threaten the biosphere?
a) It increases biodiversity
b) It disrupts ecosystems and species survival
c) It improves agriculture globally
d) It decreases the number of natural disasters

# Answer Key for Teachers

1. b
2. d
3. c
4. b
5. d
6. c
7. b
8. d
9. b
10. c
11. a
12. b
13. a
14. b
15. c
16. b
17. a
18. b
19. b
20. b