

Chapter 58 – The Biosphere



1. List examples of factors that limit geographic distribution of life on Earth.

2. What is a **biome**? List the 8 principal biomes. What are some additional biomes recognized by some ecologists?

3. What 2 key environmental factors determine which biomes are found where?

4. What is the largest biome on earth? _____ .

5. Fill in the following chart:

Biome:	<u>A</u>biotic Characteristics	Biotic Characteristics
Tropical Rain Forest		
Savanna		
Desert		
Temperate Grasslands (Prairies)		
Temperate Deciduous Forest		
Temperate Evergreen Forest		
Coniferous Forest (Taiga)		
Arctic Tundra		

6. What is **permafrost**?

7. What is the primary factor which determines the properties of freshwater communities?

8. What is meant by **thermal stratification**? Describe the annual cycle of thermal stratification in a temperate-zone lake.

9. What is the difference between a lake that is **oligotrophic** and one that is **eutrophic**?

10. What can cause an oligotrophic lake to become eutrophic?

11. Describe the following oceanic zones:

a. **Intertidal** _____

b. **Neritic** _____

c. **Photic** _____

d. **Benthic** _____

e. **Pelagic** _____

12. What is the major primary producer in oceanic open waters? _____

13. Why are the waters over the **continental shelves** relatively high in productivity? _____

14. What are **estuaries**? Why are they so important?

15. What is a **bank**? a **coral reef**?

16. Why do upwelling regions have the highest primary productivity per unit area in the world's oceans?

17. Unlike most parts of the deep sea, **hydrothermal vent communities** are full of life. Why is this?

18. What is **DDT**? Why did it become such a problem?

19. Why are freshwater habitats the most threatened habitat today?

20. What is most likely the greatest threat to terrestrial ecosystems today? _____

21. What is the phenomenon called the **ozone hole**? What is the major cause? Explain.

22. What is the phenomenon called **global warming**? What is the major cause? Explain.

23. How will global warming affect humans?
