

BIOMES

<http://mbgnet.mobot.org/>

The Missouri Botanical Garden has comprised a biome website inundated with ecological information. Your task: to search the website and complete the following assignment.

As you visit each web page, take time to digest the material and LEARN it! HAVE FUN! 😊

Terrestrial Biomes

1. Do we have rainforests within the United States? If yes, where? _____

2. There are two main types of rainforests. Compare and contrast the rainforests by completing the following chart:

	Tropical	Temperate
Temperature		
Quantity of tree species		
Decomposition rate		
Amount of precipitation		
Type of leaves		

3. Are all forests within the tropics tropical rainforests? EXPLAIN!

BIOMES

4. How low can the temperature dip in the tundra?
5. What is permafrost?
6. What is the average annual precipitation in the tundra?
7. List 3 animals that live in the tundra and give their adaptations to survive in the tundra.
 - a.
 - b.
 - c.
8. Which organism (actually a symbiotic relationship between an algae and a fungus) grows on the rocks within the tundra?
9. In the taiga, there are long winter nights and long days during the summer. Why?

BIOMES

10. What are the advantages to needles on conifers?

11. Many deserts are caused by the "rainshadow" effect. Explain what this is.

12. What are the two main adaptations all desert plants have in order to survive in the hot, dry weather?
 - a.

 - b.

13. Deciduous trees:

14. What causes the four seasons within the temperate deciduous forest?

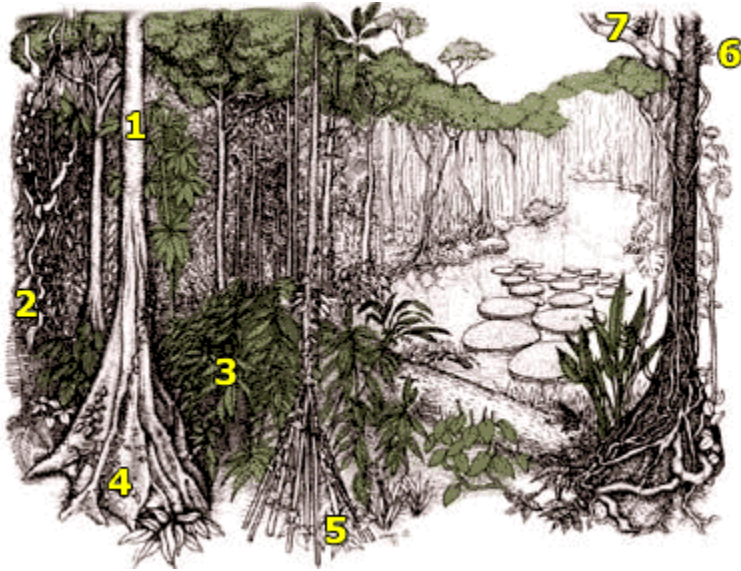
15. During the autumn, deciduous trees begin to turn colors. What is biologically happening to cause this phenomenon?

16. Why can't deciduous trees keep their leaves all year long in the temperate deciduous rainforest?

17. On which continent are grasslands NOT located?

BIOMES

The following picture is of several plant adaptations in the rain forest.



18. List the adaptations shown in the above picture and summarize (in your own words) the description of each.

1.

2.

3.

4.

5.

6.

7.

BIOMES

Aquatic Biomes

19. Water biomes are divided into two main categories:
 - a.
 - b.
20. It is often said that the fate of every pond is to become land. There are 4 main stages in pond-to-land succession. Briefly (and in your own words) describe the four main stages.
 - a.
 - b.
 - c.
 - d.
21. What is the difference between a lake and a pond?
22. Is the water temperature within a lake uniform from top to bottom? Why or why not?
23. What is "winterkill"?

BIOMES

24. An estuary is an aquatic ecosystem in which salt water meets fresh water. Is the salt water located on the top or bottom? _____ Why?
25. With both salt and fresh water, do you think a greater or lesser number of organisms are able to survive here? DEFEND YOUR ANSWER.
26. Intertidal zone:
27. How are organisms adapted to living within the intertidal zone?
22. There are three light zones:
1. sunlight zone
2. twilight zone
3. midnight zone

Label each zone on the diagram below. Then identify some characteristic organisms within each zone.

