

Biomes of the World

A biome is a large geographical area with the distinctive plant and animal groups that are adapted to living there. Biomes include **tundra**, **rainforest**, **taiga**, and **desert**. Each biome has specific kinds of plants and animals that live there. The same animals that live in a desert would not be able to survive in the tundra.

What a biome is like depends on the **climate** in that part of the world. Climate is largely due to how directly the **sun's rays** hit earth. Near the equator, the sun's rays hit at a **direct angle**. This makes the sun's radiation intense. As you move away from the equator towards the poles, the angle decreases and the sun's radiation is less intense. The intensity of the sun makes the air warmer or colder over a different part of the earth. These **hot and cold air masses** and the **winds** that move them around are a key factor in determining climate. Climate also depends on **precipitation**, which is how much moisture a particular area receives. Rainforests are very wet compared to deserts.

The climate of a biome determines what kinds of **plants** can grow there. Plants need specific adaptations to be able to grow in a certain area. Plants need a certain level of **sunlight**, **specific temperatures**, and **adequate precipitation** to survive. Plants living in different areas of the world can look and function quite differently. Some plants are so small they can barely be seen. By contrast, the giant sequoia trees of California are some of the largest living plants on earth. Plants have adaptations that have allowed them to survive in the biome in which they are found. For example, desert plants are very efficient at conserving water and are able to grow in a very dry climate.

The plant life that is present in a biome determines what kinds of **animals** can live there. The vegetation found in each biome is suited to a particular kind of animal life. Any change in the environment can affect the conditions in a biome, which in turn affect the kinds of plants, and animals that can survive there.

Name _____

Date _____

Biomes of the World Questions

1. A _____ is a large geographical area along with the distinct groups of plants and animals that live there.
2. Give an example of a biome.
3. True or False. The characteristics of a biome depend on the climate in that area.
4. Near the equator, the sun's rays hit at a _____ angle. This angle makes the sun's rays intense.
5. As you move toward the poles, what happens to the intensity of the sun's rays?
6. What circulates hot and cold air masses?
 - a. rainfall
 - b. wind
 - c. trees
 - d. mountains
7. The climate directly determines what type of _____ can live in a biome.
8. Some of the factors that affect what type of plants can grow are:
 - a. sunlight
 - b. precipitation
 - c. temperature
 - d. all of the above
9. What type of conditions are desert plants adapted to?
10. The plant life directly determines what kind of _____ can live in a biome.

Biomes of the World Answers

1. A **biome** is a large geographical area along with the distinct groups of plants and animals that live there.
2. Give an example of a biome. **Desert, tundra, taiga, grassland, rainforest...**
3. **True** or False. The characteristics of a biome depend on the climate in that area.
4. Near the equator, the sun's rays hit at a **direct** angle. This angle makes the sun's rays intense.
5. As you move toward the poles, what happens to the intensity of the sun's rays? **It decreases**
6. What circulates hot and cold air masses?
 - a. rainfall
 - b. wind**
 - c. trees
 - d. mountains
7. The climate directly determines what type of **plants** can live in a biome.
8. Some of the factors that affect what type of plants can grow are:
 - a. sunlight
 - b. precipitation
 - c. temperature
 - d. all of the above**
9. What type of conditions are desert plants adapted to? **Dry, hot**
10. The plant life directly determines what kind of **animals** can live in a biome.