

7th Grade Science - Life Science

Unit 2: Biomes

GPS.07.SC.C.S7L4: Students will examine the dependence of organisms on one another and their environments.

Element e) Describe the characteristics of Earth's major terrestrial biomes (i.e. tropical rain forest, savannah, temperate, desert, taiga, tundra, and mountain) and aquatic communities (i.e. freshwater, estuaries, and marine).

Unit Essential Question(s)

1. How do I fit into the larger world?
2. How does change in climate affect the organisms in an environment?
3. How do changes in temperature and /or precipitation affect the organisms in an environment?
4. How do the biomes of the world compare?

Key Learnings

Students will know that:

1. Biomes and ecosystems are different.
2. Biomes have different characteristics.
3. Organisms have adaptations that allow them to live in particular biomes.

Students will be able to:

1. Explain that ecosystems are small parts of a biome.
2. Compare and contrast the characteristics of Earth's major terrestrial and aquatic biomes.
3. Conclude that different organisms have adaptations for living in a particular biome.

Biomes: Vocabulary

1. **biomes** - a group of land ecosystems with similar climates and organisms.
2. **tundra** - an extremely cold, dry biome.
3. **taiga** - also known as the boreal forest, it begins where the tundra ends and is characterized by coniferous trees.
4. **tropical rain forest** - a biome with a warm, humid climate with over 300cm of rain a year.
5. **temperate rain forest** - a biome that receives more than 300cm of rain a year and has moderate temperatures
6. **temperate** - deciduous forest with four distinct seasons (where you live)
7. **desert** - an area that receives less than 25 cm of precipitation per year
8. **grasslands** - An area populated by grasses and other non-woody plants. It receives 25-75 cm of rain each year.
9. **freshwater** - water without a salt (ponds, lakes, rivers, etc.)
10. **saltwater** - water with a high salt content (oceans)
11. **marine** - having to do with the ocean
12. **estuary** - a habitat in which the fresh water of a river meets the salt water of the ocean
13. **marsh** - a wet area characterized by grasses and is associated with the tidal zone
14. **swamp** - a bottomland with more woody plant than a marsh and better drainage than a bog (where you live)
15. **intertidal zone** - an area between the high-tide line and the lowest low-tide line
16. **neritic zone** - an shallow water area below the low-tide line and extending over the continental shelf
17. **open ocean** - an area in the open ocean with contain the surface zone and the deep zone