

Rainforest Ecosystems

Cross-Curricular Focus: Life Science



Rainforest ecosystems have more rain than other areas. Tropical rainforests are found near the equator, the imaginary line of latitude that runs east and west around the widest part of Earth. The weather is warm and humid all year long near the equator, and there is lots of sunlight.

Living things are **abundant** in the rainforests. There are literally thousands of species of animals, and even more kinds of plants. Their needs for sun, water, and warmth are all met by the conditions of the rainforest. The excellent conditions allow them to not only survive, but **thrive**. The amazing variety of plants and their sheer numbers in one location make rainforests a major source of Earth's overall oxygen supply.

Tropical rainforests have layers of life. The uppermost layer is called the **canopy**, where very mature, tall trees stretch out their branches and leaves, nearly blocking out the sun in some places. High in this green, leafy habitat, you can find monkeys, tree frogs, and many different species of birds. Below the treetops is a second layer, called the understory. The understory is shaded by the canopy, so not as much sunlight reaches the plants there. Bushes and growing trees make up the understory, which is home to birds, reptiles, and small climbing animals. The third layer, the forest floor, is busy with life. Vines, shrubs, mosses, ferns, flowering plants, and large predator animals, such as jaguars, can be found there. Small animals burrow into the ground and live in bushes. Leaf-cutter ants and other insects busily hunt for food and water, marching together in long, winding lines.

Rainforests contain some of Earth's greatest biological treasures. Many medicines are made from plants found there, including some of the most promising drugs for treating cancer and AIDS. Food sources are also very rich. There are over 3,000 fruits alone. Rainforests also grow the vegetables and grains that make up most of the world's daily diet, like corn, potatoes, rice, and squash. Spices like ginger, cinnamon, and chocolate grow alongside coffee and a variety of nuts. Add to all this bounty the oxygen stores created by all the green plants, and it is clear that the rainforests have more value than can be measured.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) Some people want to cut down the rainforests to use the land for buildings and businesses. What would you say to them?

2) Why might a scientist be interested in the rainforests?

3) Do you think you could survive alone in a rainforest? Why, or why not?

4) Describe the conditions that make a rainforest a good place for many living things.

5) Why do you think the weather is warmer at the equator than in other areas?
