

Tropical Rainforests

Name: _____

Date: _____

Vocabulary for this reading:

Tropics: area of land around the middle of the Earth

Biome (Life Zone): region with its own life forms and climates

Fertile: able to support much plant growth

Adaptations: a physical or behavioral feature that helps a plant or animal survive in its habitat



Location

Imagine a globe. The **Tropics** are an area of the Earth around the middle of the globe, like a wide belt. Rainforests grow in the Tropics on the continents of Africa, Asia, North America, South America, and Australia. The rainforest of the Congo Basin, located along the Equator in West Africa (latitude: 0°), is the second largest rainforest on Earth.

Climate

Tropical rainforests grow in warm, wet climates, and they are the rainiest **biome** on Earth. For example, there are parts of Brazil that receive an average of 96 inches of rain per year. Temperatures are usually between 80-90° Fahrenheit and do not change much throughout the year, therefore there are no distinct seasons.

Plants

Rainforests can be divided into four main layers: the emergent layer at the top, then the canopy, the understory, and the forest floor at the ground level. The tallest trees grow all the way into the emergent layer. Most rainforest life is found in the canopy, about 130 feet above the ground. The canopy receives the most rain and sunshine, and so contains the most food, such as leaves, flowers, and fruits. Between the canopy and the forest floor is an understory of smaller trees, climbing plants, and large-leaved shrubs that can tolerate the shade. Only one or two percent of the sunlight that hits the canopy filters through to the forest floor. The ground is almost bare except for a thin carpet of leaves.

Rainforest plants must be able to thrive in a climate with a lot of rain, little sunlight, and soil that is not very **fertile**. The leaves of rainforest trees, and other rainforest plants, are often thick and leathery with pointed tips called “drip tips.” The rain runs quickly off these leaves and stops moss from growing and blocking out the sunlight. Plants need light to make food, but there is not much light on the dark forest floor. One group of plants, called “air plants,” or

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epiphytes, can grow on the branches, trunks, and even the leaves of trees in order to be closer to the sunlight! The roots of some trees spread out above the ground to form wide, flat wing-like shapes called buttresses (*picture on next page*). These buttress roots may extend 16 feet from the trunk. They probably help to support the tall trees, but may also help the tree to feed. They spread widely and send down small feeding roots into the soil. Flowers are either brightly colored or strong smelling to attract birds and bats that will spread the seeds.

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Oil Palm



Mahogany Tree



Orchids



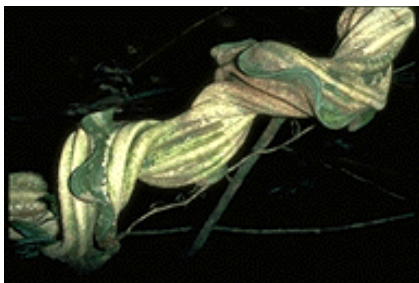
Tree with Buttress Roots



Leaf with "Drip Tip"



Liana (climbing vines)



Bromeliad (type of air plant)



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Animals

The animals of the rainforest have **adaptations** to help them move through tall trees, see at night, and fly quickly and carefully. For example, some animals have long arms for swinging, tails for gripping, hanging, and balancing, and sticky toes, rough soles, or long claws for extra grip. Some birds have short, rounded wings that help them twist and turn through the branches. Predator animals in the rainforest use poison, teeth, claws, and sticky tongues to catch their prey. Prey animals also use methods of defense, such as poison, and camouflage, such as looking like leaves, twigs, or bark.

Okapi



African Elephant



Black Colobus Monkey



Gorilla



Grey Parrot



Goliath Beetle



Hornbill Toucan

