TROPICAL RAINFOREST

One of the most fascinating biomes on planet Earth is the tropical rainforest. It is filled with tall [trees](https://www.ducksters.com/science/trees.php), interesting plants, giant insects, and all sorts of animals.  
  
**What makes a forest a rainforest?**  
  
As you might have guessed from the name, rainforests are forests that get a lot of rain. Tropical rainforests are located in the tropics, near the equator. Most rainforests get at least 75 inches of rain with many getting well over 100 inches in areas.  
  
Rainforests are also very humid and warm. Because they are close to the equator, the temperature stays between 70 and 90 degrees F for most of the year.  
  
**Where are the world's rainforests?**

There are three major areas of tropical rainforests:

* Africa - The major tropical rainforest in Africa is in the southern central portion of the continent with the Congo River running through it. There are also rainforests in western Africa and Madagascar.
* Southeast Asia - Much of Southeast Asia is considered part of a tropical rainforest biome. It runs all the way from Myanmar to New Guinea.
* South America - This is the world's largest tropical rainforest. It covers much of the northern part of South America as well as the southern portion of Central America. The area is often called the Amazon basin and has the Amazon and Orinoco Rivers running through it.



**Biodiversity**  
  
The tropical rainforest has the most biodiversity of all the land biomes. Despite only covering around 6% of the Earth's surface, scientists estimate that around half of the planet's animal and plant species live in the world's rainforests.

**Layers of the Rainforest**  
  
The rainforest can be divided up into three layers: the canopy, the understory, and the forest floor. Different animals and plants live in each different layer.

* The canopy - This is the top layer of trees. These trees are usually at least 100 feet tall. Their branches and leaves form an umbrella over the rest of the layers. Most of the plants and animals live on this layer. This includes monkeys, birds, insects, and reptiles of all sorts. Some animals can live their entire lives without leaving the canopy to touch the ground. This layer is the loudest layer with the animals making lots of noise.
* The understory - Beneath the canopy is the understory. This layer is made up of some shorter trees and shrubs, but mostly the trunks and branches of the canopy trees. This layer is home to some of the larger predators like snakes and leopards. It is also home to owls, bats, insects, [frogs](https://www.ducksters.com/animals/gold_poison_dart_frog.php), [iguanas](https://www.ducksters.com/animals/green_iguana.php), and various other animals.
* The forest floor - Because of the thickness of the canopy, very little sunlight makes it to the forest floor. This layer is home to lots of insects and spiders. There are also some animals that live on this layer including deer, pigs, and [snakes](https://www.ducksters.com/animals/green_anaconda.php). This layer is the quietest layer as animals sneak around in the dark making little noise.

Sometimes scientists refer to a fourth layer called the emergent layer. This is made up of tall trees that grow above the canopy.  
  
**What makes this biome so important?**

The rainforests are important to the world for many reasons. One reason is that they act as the Earth's lungs by producing around 40% of the world's oxygen. Since all of us need oxygen to live, that reason ranks pretty high. The rainforests also provide a number of important drugs to help sick people and cure diseases. It is believed by many that there are even cures for cancer waiting for us to discover in the rainforest. The rainforest is also home to many species of animals and is a beautiful and irreplaceable part of nature.  
  
**The Disappearing Rainforests**  
  
Unfortunately, human development is killing off much of the world's rainforest. Around 40% of the world's rainforests have already been lost. Environmentalists are doing what they can to help countries preserve this vital biome.

**Facts About Tropical Rainforests**

* Surprisingly, the soil in a rainforest is shallow and has little nutrients.
* In the Amazon rainforest there are over 2,000 species of [butterflies](https://www.ducksters.com/animals/butterfly.php).
* They are home to interesting "flying" animals such as squirrels, snakes, and frogs.
* It is estimated that 25% of the ingredients in medicines today come from the rainforest.
* Rainforests impact the temperatures and weather patterns throughout the world.
* One fifth of the world's freshwater supply is in the Amazon rainforest.
* Every second, a section of rainforest the size of a football field is cut down.
* Only about 2% of the sunlight hits the forest floor.