

Rainforests 1

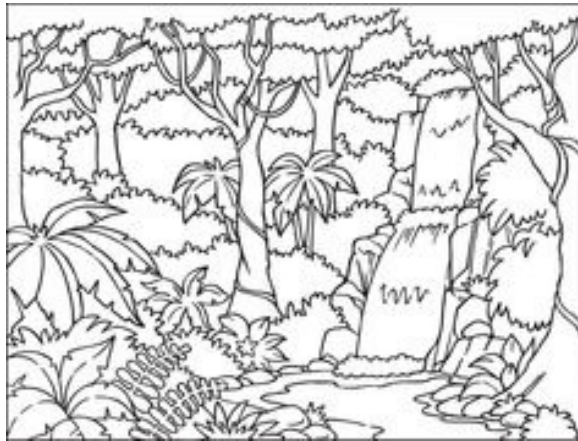
What is a Rainforest?

On the outside, a rain forest has a wall of about 6 metres (20 feet) thick that is made of a tangle of vines that love light.

This wall is very thick on the outside and it looks as if the whole jungle is this thick. But inside this wall you will find animal paths or a stream to follow. It is like entering another world.

Once you're inside, you can look up and see a tree canopy that's as high as a 17 storey building!

It's fairly dark inside the canopy. Only 1% of the sunlight ever actually gets to the floor of the forest because of the tall trees above. And moonlight, even a full moon, doesn't get through at all.



1. What makes up the outside wall of a rainforest?
2. What might you find inside this wall?
3. Why do you think it is dark inside the rainforest?

Rainforests 2

Plants of the rainforest

Draw a picture showing these plants:

- **Trees** grow tall as they push their way up to get the light. The tallest trees in the rainforest grow up to 60 metres (200 feet) high. The tall trees that poke through are called the "*emergents*". They make an umbrella that can cover an entire acre.

The soil on the rain forest floor is rich in nutrients, but only 100 cm (4 inches) deep with red clay beneath it. This causes the trees to have very shallow roots. That's why many tall trees have buttresses or extra trunks supporting the first one around the bottom. These *buttresses* help stabilize and hold the tree up, like a set of crutches.

- **Stranglers** are plants that grow on a tree as a parasite plant. The stranger plant grows up the tree and the tree dies. The strangler plant tree now keeps growing around the dead tree.
- **Vines** grow around and around other trees. They use little hooks called tendrils to hold on to trees.
- **Tree ferns** grow out from trunks of trees to catch light and water. They have broad leaves, which grow into the shape of baskets. They can catch water in the baskets.
- **Lichens, mosses and fungi** grow on other plants. They grow on trees to get sunlight.

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Layers of a rain forest

Rain forests have different layers that support different animals and insects. Some plants and animals live in specific layers, while others live and feed wherever they can.

EMERGENT LAYER

The tallest trees are the emergents, growing high as 60 metres (200 feet) above the forest floor with trunks that measure up to 5 metres (16 feet) around. Most of these trees have broad-leaves. Sunlight is plentiful up here. Many animals can be found here.

CANOPY LAYER

This is the main layer of the forest and forms a roof over the two remaining layers. Most canopy trees have smooth, oval leaves that come to a point. Many animals live in this area since food is abundant.

UNDERSTORY LAYER

Little sunshine reaches this area so the plants have to grow larger leaves to reach the sunlight. The plants in this area seldom grow to 4 metres (12 feet). Many animals live here

FOREST FLOOR

It's very dark down here. Almost no plants grow in this area. Since hardly any sun reaches the forest floor things begin to decay quickly. A leaf can decompose in just 6 weeks.

Draw a rainforest showing the different layers.

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People of the rainforest

Some very interesting people live in the rain forest of Papua New Guinea. They are called the *Huli Wigmen* tribe. The men of this tribe wear large wigs of matted human hair, that they grow themselves. They must stay in a special "school" in the forest for up to three years while their hair grows. This school is a group of huts in the rain forest surrounded by tall wooden fences. Every day the men sprinkle special water on their hair and use twigs and rope to shape the wig. Once it has grown bushy enough, they shave their heads. Then they use natural dyes found in the rain forest to colour their wigs red or black. They decorate them with flowers, leaves, shells, bones, feathers, and fur that they also collect from the rain forest.

Many of them have two wigs, one for wearing everyday and one for ceremonies. When they dress up, they paint their faces with juice from berries and rub pig fat over their bodies. Then they put big bushy leaves in woven belts to make a skirt and dance in a big circle. They'll usually invite other tribes from the area to join them. The wigmen can be very fierce, so these dances are a good way to build friendships with other tribes.

1. Where do the wigmen live?
2. What do the wigmen do at their school?
3. What are the two wigs used for?

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Where are rainforests found?

South America, Central Africa, India, South East Asia, Papua New Guinea and the South Pacific Islands.

Rainforests of the South Pacific

South Pacific Islands with rainforests are:
American Samoa, Cook Islands, Fiji, French Polynesia, Niue, Samoa, Tonga, Wallis and Futuna Islands

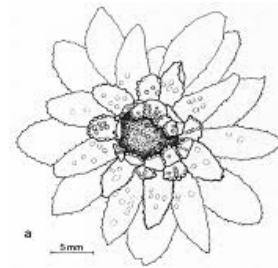
Draw a map of the South Pacific and name the islands with rainforests.



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Rare plants of the Fijian rainforest

In Fijian rainforests you can find a species of tree called Degeneraceae. This is a flowering tree related to magnolias, and only grows in Fiji. Look at the pictures below and draw a picture of this tree.



The Fijian rainforest is also a home for different kinds of orchids. They come in pinks, purples and yellows. Draw some of these.



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Animals of the South Pacific rainforests

- Iguanas, including the Crested Iguana (now endangered)
- Orange dove
- Red shining parrot
- Fruit bats including the Fijian monkey-faced flying fox
- Snakes
- Geckos
- Frogs



Banded Iguana (green and blue)



Crested Iguana (blue or green)

Draw and name five animals of the Fijian rainforest.

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Our vanishing rainforests

The world's rainforests are currently disappearing at a rate of 6000 acres every hour (this is about 4000 football fields per hour). When these forests are cut down, the plants and animals that live in the forests are destroyed, and some species are at risk of being made extinct. As forest trees are cut down on a large scale, the balance of the earth's ecosystem is disrupted.

We need the rain forests to produce oxygen and clean the atmosphere to help us breathe. We also know that the earth's climate can be affected, as well as the water cycle. Rainforests also provide us with many valuable medicinal plants, and may be a source of a cure from some deadly diseases.

As a world community, we must be careful not to destroy the resources that people will need in the future.

Many animals are illegally taken from rainforests and sold in other countries. Parrots and iguanas, for example, are often imported illegally. We should not buy these animals, since that encourages other people to bring in more animals.

Many products, such as rubber, coffee and timber come from rainforests. Rainforests are cut down to harvest the timber and also to make room for farms to grow coffee and spices. Each of us needs to be thoughtful about the way we consume these products. Recycle and re-use whenever possible, and help keep the earth green and healthy.

Why are rainforests so important?

How can the world's rainforests be protected?