

The Rainforest

Learning Objective:

To explore the layers of vegetation in a rainforest.



Imagine you travelled to the rainforest to do some exploring.



What do you think the temperature would be like?

What do you think you would see when you got there?

What do you think it would be like?



Tropical rainforests are very hot and humid places. Because they are near the equator, they are one of the warmest places in the world.

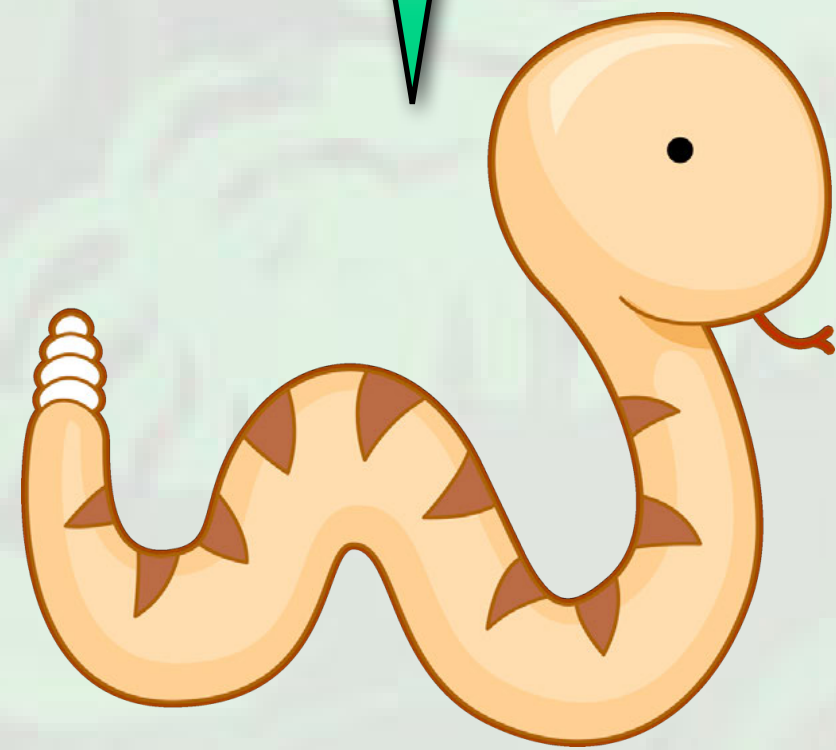
They also have a lot of rainfall (about 250cm a year) and rain falls nearly every day. If you went to explore the rainforest you would feel very hot and sticky!

BACK

NEXT

This hot and humid weather makes it perfect for plant growth. Plants love heat and water so rainforests are teeming with plant life, including trees, vines, flowers and mosses.

This makes it perfect for animals too who can live in, and feed from, the plants.



Rainforests are home to thousands of species of plants and thousands of species of animals.

There are several different layers of vegetation in the rainforest.



The emergent layer

The canopy

The under storey

The forest floor

Each layer (or strata) has different temperatures, humidity and sunshine levels and is home to different types of animals.

BACK

NEXT

The emergent layer



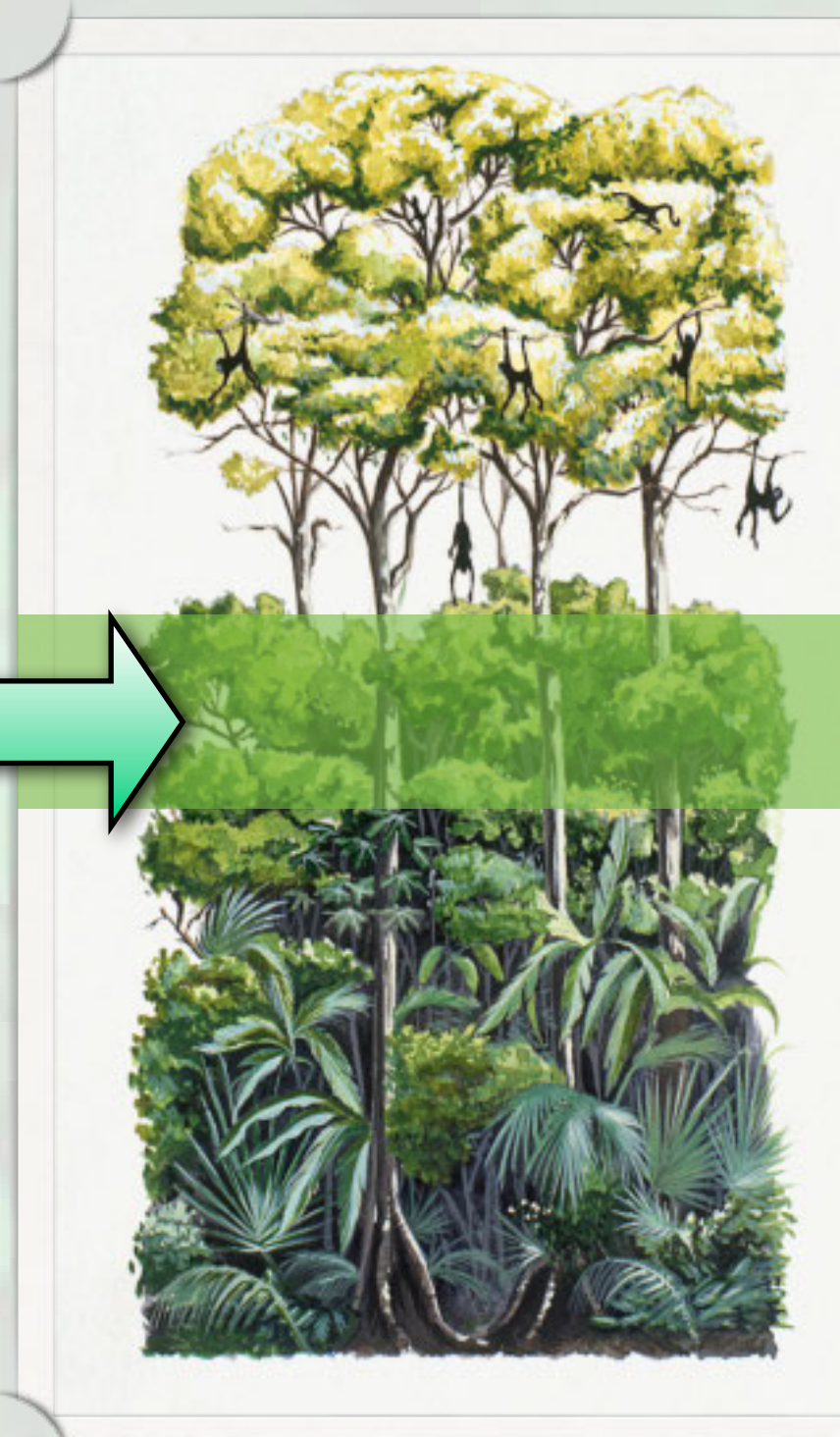
The emergent layer is the tallest layer of the rainforest. There are only a few trees in this layer compared to the canopy but they can grow as tall as skyscrapers (between 40m and 80m). These 'forest giants' have thin trunks and weak roots but because they are above the other trees they have more light and more room to grow.

This also means that they are exposed to the hot sun and strong winds. Lots of trees in the emergent layer have thick and waxy leaves to protect them from this. The emergent layer is home to lots of birds, such as macaws and eagles, monkeys, bats and insects such as butterflies.

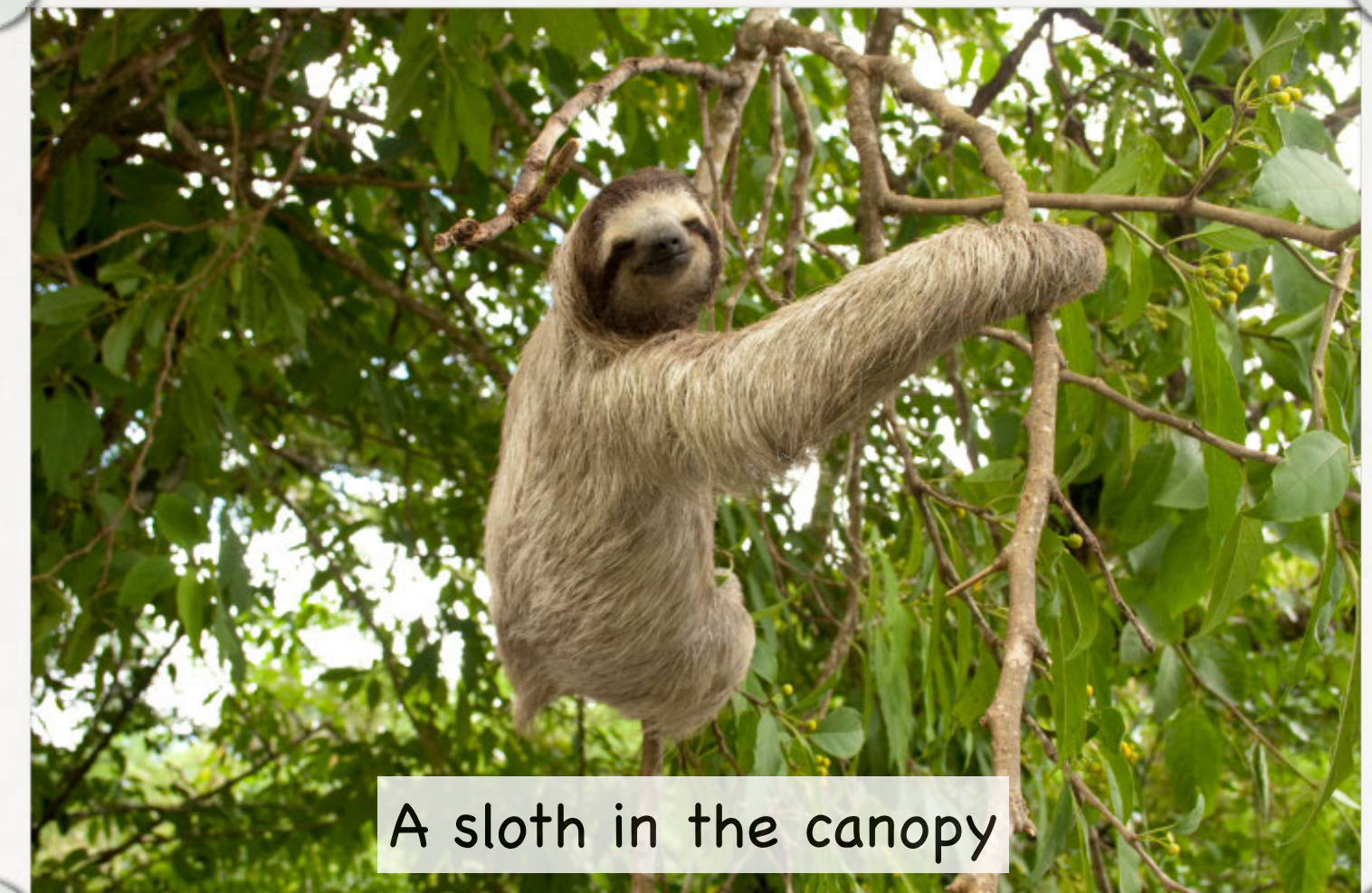


The canopy

There is a thick layer of vegetation below the emergent layer which is known as the canopy. The canopy is made up of leaves and branches from the canopy trees which all crowded together. Because of this, the canopy blocks out 98% of the sunlight to the layers below it. It also stops 80% of the rainfall from reaching the ground.



The canopy is the main layer of the rainforest and most of the animals have their homes here, including monkeys, orang-utans, iguanas, birds, snakes and mammals such as sloths. Plants in the canopy include trees, vines, flowers, mosses.



A sloth in the canopy

The under storey

The under storey has very little sunlight since it is blocked by the canopy so it is a dark, damp place. Because there is little sunlight, plants in the under storey cannot grow tall but small shrubs and trees live here. However, the conditions in the under storey are perfect for moss and algae to grow. These can grow on tree trunks and vines.



The under storey is home to lots of insects and reptiles, as well as bats, frogs and small mammals. Lots of animals live in tree trunks where pools of water collect. This is perfect for amphibians who can lay their eggs there.



Can you spot the iguana in this picture?

BACK

NEXT

The forest floor



The forest floor is the bottom layer of the rainforest. The forest floor has poor soil but nutrients come from rotting plant debris. Fallen leaves, branches, the remains of dead creatures and other forest litter fall on the ground to cover the ground. These decay quickly thanks to insects, fungi and the hot conditions.

The forest floor is home to many varieties of insects who make their home in the forest litter, as well as frogs, reptiles and large mammals. Gorillas, anteaters, tapirs, elephants, tigers and jaguars all make their home in the forest floor.



Let's think back...

Can
you remember the
names of each of the
levels of the rainforest
and their order?



BACK

NEXT