

# RAINFORESTS

Year 5

Geography

Animals adapt to find food and escape predators.

- Many animals live in the canopy their entire lives as this is where most fruits and flowers are.
- Some have strong limbs for climbing and leaping e.g. howler monkeys.
- Some have suction-cups for climbing e.g. red-eyed frogs.
- Some have flaps of skin for gliding between branches e.g. flying squirrels.
- Some are camouflaged to hide from predators e.g. leaf toad.
- Many animals have adapted by learning to eat a food eaten by no other animal, e.g. toucans have a long, large bill to reach fruit on branches that are too small to support the bird's weight. The bill also is used to cut the fruit from the tree.
- Many animals are only active at night (nocturnal) when it is cooler e.g. sloths.
- Many can swim, allowing them to cross rivers or escape a flood e.g. jaguars.
- Some animals increase their sense of hearing, smell and even taste to help escape from predators in the dark of the forest floor e.g. carpet python.

## Interesting facts

Rainforests cover approximately 6% of the Earth's surface by contain more than ½ of the world's plants. About 90% of organisms are found in the canopy.

About 30 million species of plants and animals live in tropical rainforests..

Many things we have in our homes come from rainforests including: chocolate, sugar, rubber, bamboo and many medicines.

## Key Vocabulary

Afforestation- replanting of trees

Agriculture- Another word for farming

Biodiversity- The variety of life on earth (plants, animals, fungi and micro-organisms) and their habitats.

Biome- areas of our planet with similar climates, landscapes, animals and plants.

Deforestation- The clearing of large areas of forest lands which are never re-planted.

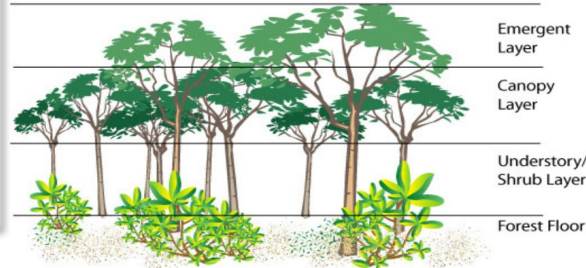
Flora- Plants

Fauna- Animals.

Rainforest- A forest of broad-leaved evergreen trees that receives high annual rainfall.

Species- A group of animals, plants or other living things that all share common characteristics.

Tropic of Cancer and Tropic of Capricorn Imaginary lines north and south of the equator. (Most rainforests can be found between these two lines).



Emergent Layer (50m)- Giant trees that enjoy the most sun but high winds & cold.

Canopy(30m)- Dense layer of trees overlapping each other. Home to most animals in rainforests.

Understory (20m)/ shrub layer (2-5m)- Relatively dark, open area below the canopy with younger trees, ferns, bushes etc

Undergrowth- Also known as the forest floor, mainly consisting of fallen leaves, fruit etc. that

## Human features

Deforestation- The Amazon rainforest has been rapidly destroyed over the past 50 years. 150 acres of rainforest are destroyed every minute of the day.

Afforestation (replanting)- logging companies must replant two or three trees for each tree felled.

## Impact of Deforestation

1. An area the size of 20 football pitches is destroyed every 60 seconds.
2. ½ of the tropical rainforests we had are gone.
3. 28,000 species of animals are expected to become extinct in the next 25 years.
- 4 Local people's homes are destroyed.
- 5 Levels of carbon dioxide in the air are increasing and oxygen is decreasing.

## Causes of Deforestation

- 1 To clear space for farming: growing crops (e.g. soya beans & palm oil) and space cattle to generate cheap beef.
- 2 Chopping down trees for wood.
- 3 To build roads to mine for metals, gold & diamonds.
- 4 To dig for oil.
- 5 To flood areas to make dams & generate

## Physical features

Climate	Water	Soils	Plants	Animals
<ul style="list-style-type: none"> <li>• hot (20-28°C)</li> <li>• Sun is overhead all year round so there is no seasonal variation.</li> <li>• wet (2000mm per year)</li> <li>• Convectional rainfall every day.</li> </ul>	<ul style="list-style-type: none"> <li>• The roots of plants take up water from the ground.</li> <li>• Rain is intercepted as it falls - much of it at the canopy level, this will evaporate as it heats up to form convectional rainfall.</li> </ul>	<ul style="list-style-type: none"> <li>• Rain washes away nutrients from soil.</li> <li>• Soil is not very fertile.</li> <li>• Humus layer of rotting leaf-fall is very thin (heat speeds up decomposition).</li> </ul>	<ul style="list-style-type: none"> <li>• Most trees are evergreen.</li> <li>• Continual growing season.</li> <li>• Five layers: forest floor, shrub layer, under-canopy, canopy (30m) and emergent.</li> <li>• Epiphytes (plants that feed off other plants and take moisture from the air) e.g. ferns.</li> <li>• Absorb CO2 and release oxygen.</li> </ul>	<ul style="list-style-type: none"> <li>• Many species of animals live in the tropical rainforest.</li> <li>• Food is plentiful and grows all year.</li> <li>• Hundreds of different types of monkeys, snakes and birds.</li> <li>• Thousands of insect species live in the tropical rainforest.</li> </ul>



## Amazon Rainforest

The Amazon **rainforest** is the largest tropical rainforest in the world. It covers part of 9 different countries with over half of it located in Brazil. It's so big that the United Kingdom and Ireland could fit in it 17 times.

It contains around 390 billion trees!

The average temperature for the Amazon rainforest ranges between 18 and 22.4° C

The trees of the Amazon Rainforest produce more than 20% of the world's oxygen.

The Amazon can receive up to 430 inches of rain per year.



## Fair trade

Fair trade enables farmer to protect their way of life and continue farming but in a forest friendly way that prevents deforestation and biodiversity loss.