

## What are rainforests and what actions can we take to improve their sustainability?

### Vocabulary

**Rainforest** – an area of tall, mostly evergreen trees and a high amount of rainfall. Rainforests are Earth's oldest living ecosystems, with some surviving in their present form for at least 70 million years.

**Biome** – an area classified according to the species that live in that location. Temperature range, soil type, and the amount of light and water are unique to a particular place and form the niches for specific species allowing scientists to define the biome.

**Indigenous** – originating or occurring naturally in a particular place; native.

**Deforestation** – when humans remove or thin forests for lumber or to use the land where the trees stood for crops, grazing, extraction (mining, oil, or gas), or development as the population increases and people migrate.

**Sustainability** – ability to maintain or support a process over time,

**Climate** – the average weather conditions for a particular location over a long period of time.

### Key Knowledge

**Tropical** rainforests are found north and south of the **Equator** between the **Tropics of Cancer and Capricorn**. **Temperate** rainforests are found further away from the equator, near the **coast**. Most of the rainforests in the world are tropical.

Rainforests are home to over half the species of plants and animals in the world and are a fantastic **source of foods and medicines**.

A rainforest has many **layers** of vegetation (plants) growing within it. All of these plants grow to different heights and create layers within the rainforest.

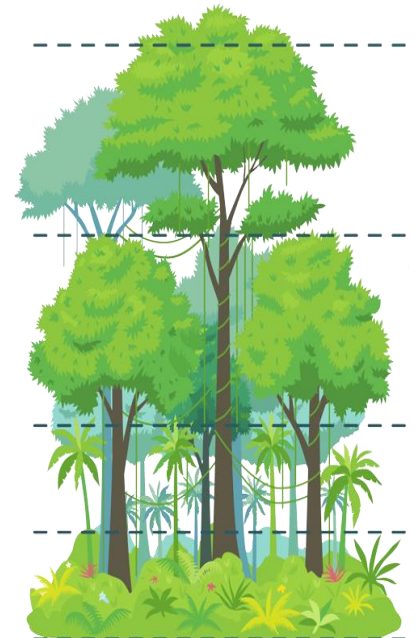
### The Amazon Rainforest

The Amazon rainforest is the largest **tropical** rainforest in the world. It is found in the continent of South America and spreads across nine countries.



### Rainforest Layers

| Forest Floor                                                                                                                  | Understorey                                                                                                                | Canopy layer                                                                                                       | Emergent layer                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| The bottom layer stretches all across the forest. It is made up of leaves, roots, shoots, branches, soil and decaying matter. | The most colourful part of the rainforest. In this layer, there are many strange and wondrous tropical plants and flowers. | The thickest part of the rainforest layer. This is the part of the rainforest layers that takes the most sunlight. | The very top of the rainforest. It is known as the sunlit zone. It is made up of some of the oldest and tallest trees in the rainforest. |



### Climate

- **Tropical rainforests** are hot and humid. Typical temperatures are between 21 and 30°C. It rains heavily throughout the year.
- **Temperate rainforests** are also are cooler and only get about half as much rain. There are two seasons: a long, wet winter, and a short, dry summer.
- They experience different climates depending on where the rainforest is from the **equator** (Tropics of Capricorn or Cancer)
- The **water cycle** plays a huge part in the rainforest's survival.