

Teachers' notes

Rainforests



Tropical rainforests are located within the humid equatorial climate belt that lies between the Tropics of Cancer and Capricorn. At least two metres of rain fall here each year, with torrential downpours an almost daily occurrence. There is little seasonal variation and average temperatures are continually around 25 degrees celcius.

Roughly two per cent of the world's land mass is covered by rainforest. The largest area – about two million square miles – is to be found in the Amazon basin, two thirds of it within Brazil. Northern Australia, Central and West Africa, Indonesia and Papua New Guinea, account for the other main areas of tropical rainforest around the world.



Rainforests are the most ancient and complex land-based ecosystems on Earth. The consistently warm, wet climate enables plants to grow all year round and provides habitats for about 30 million plant and animal species – two thirds of the world's plant species and half of the world's animal species. Many indigenous people also rely on rainforests for food and shelter.

Layers of forest fall into four main groups. The tallest trees – reaching heights of up to 70 metres – are to be found at the emergent level. These provide some shelter from heavy rain to the layers below. Smaller trees in the main canopy are intertwined with vines and flowering plants, while further down an understorey of saplings and shrubs compete for space and light. Beneath these layers of dense vegetation – penetrated by only two per cent of sunlight – lies the dark forest floor.

Rainforests are an important climate regulator and recycle vast amounts of water. They absorb carbon dioxide, prevent soil erosion and are a source of over 25 per cent of modern medicines. They are currently being destroyed at a rate equivalent to four football pitches per minute by logging companies, or to make way for cattle ranching, mining and other industry.

