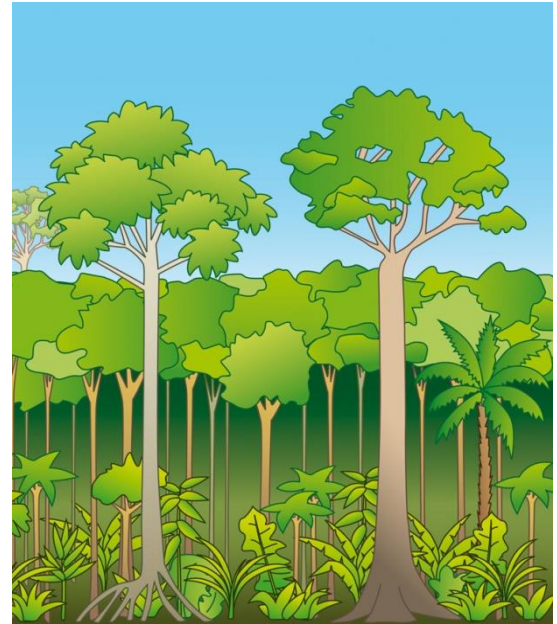


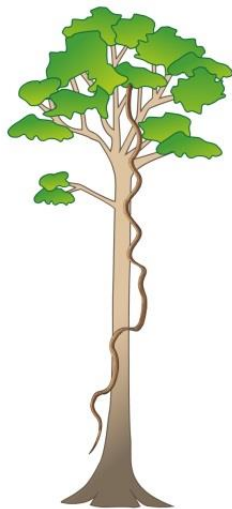
### Plants in tropical rainforests

The plants in rainforests have optimal growing conditions. That's why there are trees that grow to 60 to 80 meters tall, but also very small plants. The tall trees are called **emergents**, because they are taller than the other trees and emerge above the canopy. Some emergents have such a thick trunk that even a car or an entire school bus would fit inside! Because the emergents are so tall, they also receive the most sunlight. The shorter the trees are, the less light they receive.



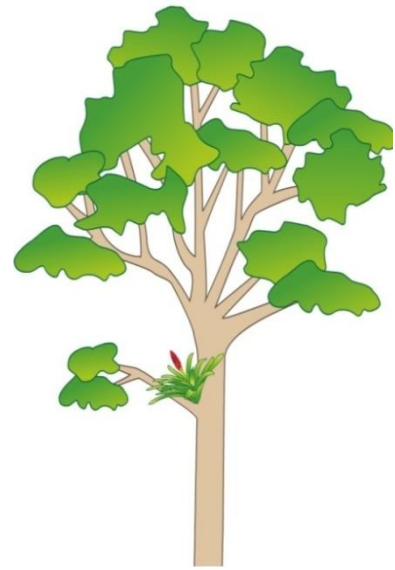
The medium-height plants are 20 to 40 meters tall. They still get enough sun. The plants on the forest floor never see the sun! When it rains, the lowest plants may have to wait a couple of minutes before the water gets to them.

Because all plants want to grow upward to the sunlight, they have come up with various tricks. These include vines and epiphytes.



**Vines** use the trees like a ladder to get up to the sun. The most well-known vine is the liana. Lianas can grow to 300 meters long. They criss-cross throughout the rainforest's canopy.

The **epiphytes** do not grow on the ground, but grow on branches, leaves, and stems of other plants. Most epiphytes grow in the upper layers of the rainforest. They get there because birds or other animals carry up the plants' seeds. Examples of epiphytes are orchids and bromeliads. Bromeliads have another special characteristic: Rainwater collects between their leaves, forming mini ponds where small animals live, such as water skimmers or poison dart frogs.



Many **crops** that we know come from tropical forests. They include bananas, coffee, cocoa, and many spices, such as vanilla and cinnamon.

Some plants in tropical rainforests are also **medicinal plants**, meaning they work like medicines to help treat diseases. One example is the pineapple. There are probably a vast number of plants with healing properties in tropical rainforests, but unfortunately they have not been discovered yet. This is why preserving rainforests is so important. They are natural pharmacies.