



The Torrid Zone-I The Equatorial Rainforests

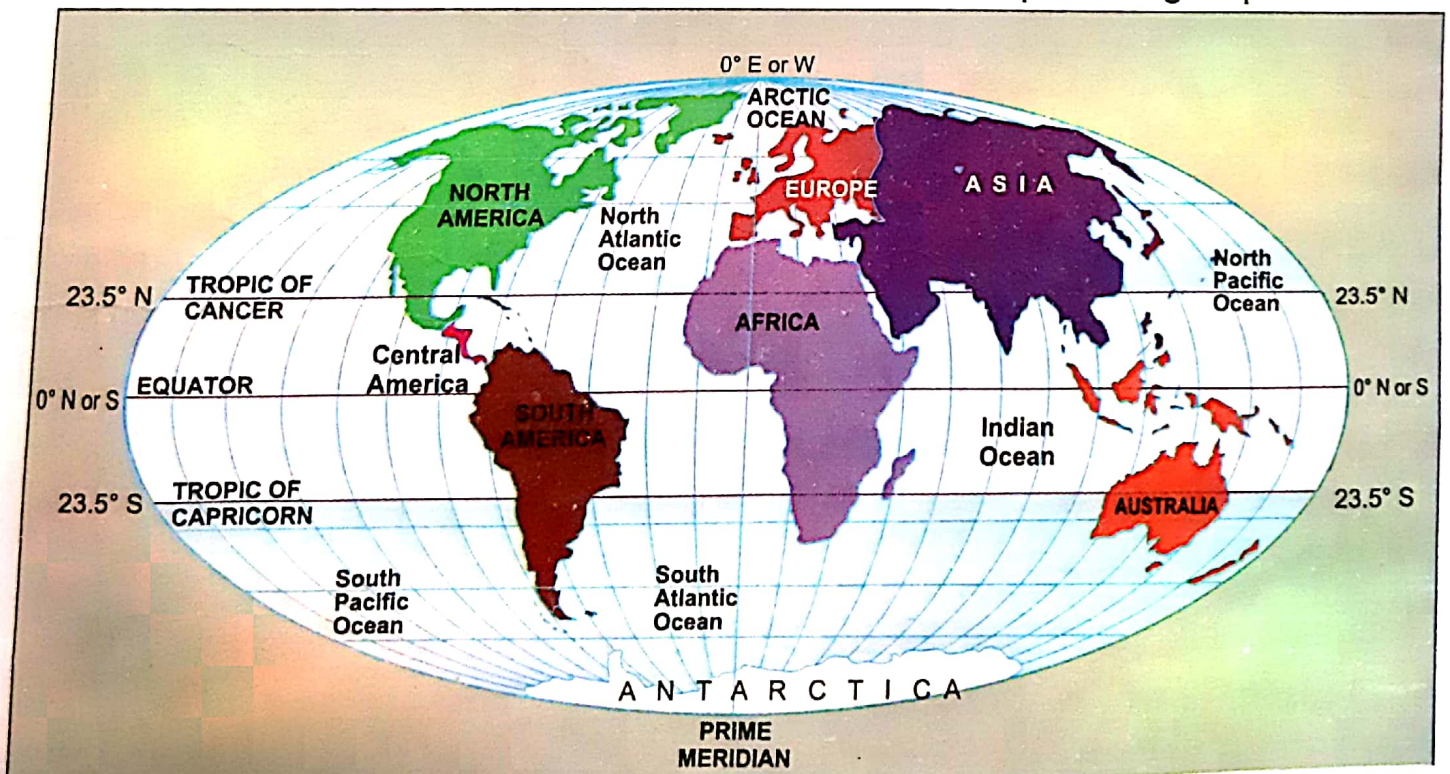
Objectives

In this lesson, you will learn about

- Location
- Climate
- Natural vegetation
- Animal life
- Life of the people
- Shifting agriculture
- Some primitive tribes of the equatorial rainforests

As mentioned earlier, each of the climatic or heat zone is further sub-divided into smaller distinct areas or natural regions. The **Torrid Zone** is subdivided into the **Equatorial region** and the **Tropical region**. Under the Equatorial region falls the **Equatorial Rainforests**. The sub-zones under the Tropical region are the **Tropical or Hot Deserts**, **Tropical Grasslands** and the **Monsoon Region**, which will be treated in later chapters.

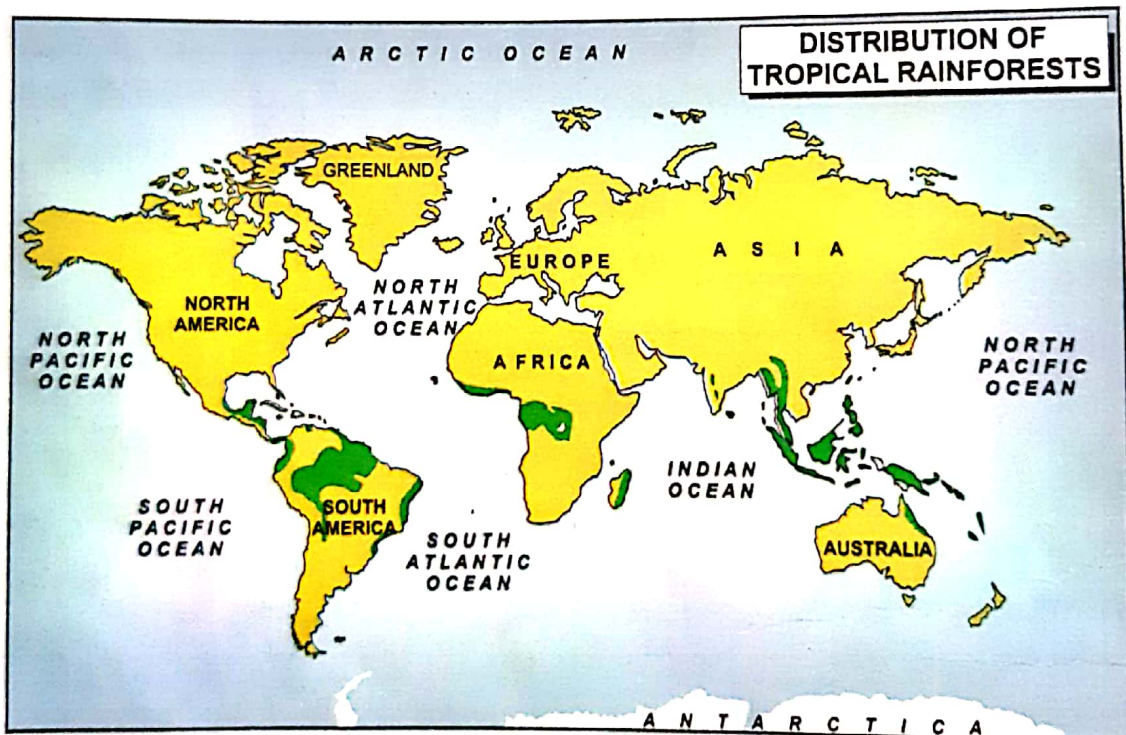
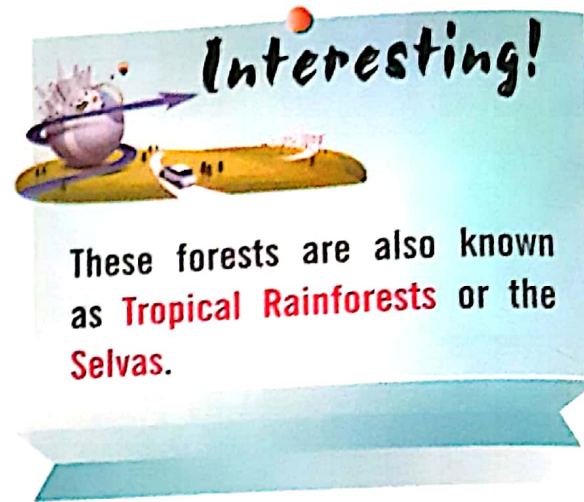
World map showing Tropical Zones



Location

As the name suggests, this region is found close to the Equator, between 0° to 10° north and south of the Equator. This region forms the **hottest** and **wettest** part of the Torrid zone. The forests in this region are distributed over three continents, namely:

- **South America:** The Amazon Lowlands in Brazil where they are known as the **Selvas**, coast of French Guiana, Columbia and parts of Equador.
- **Africa:** The entire Congo Basin (Zaire Basin) and the Guinea Coast in West Africa
- **South-East Asia:** Malaysia, Singapore, Indonesia, parts of Phillipines, Papua New Guinea, peninsular Thailand and parts of Sri Lanka

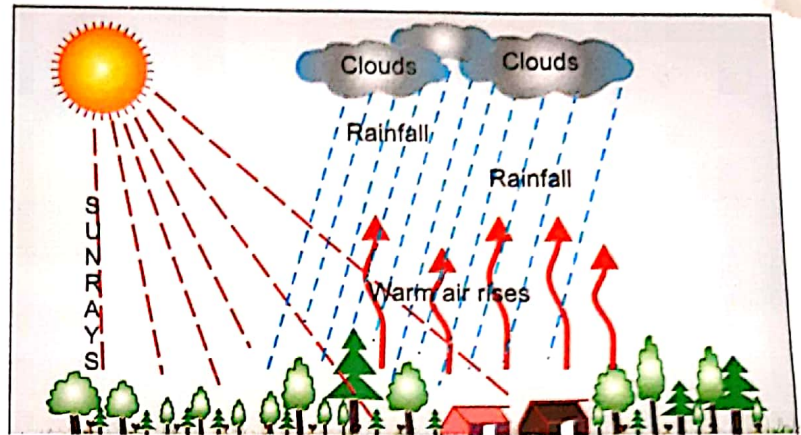


World map showing distribution of Tropical Rainforests

Climate

The climate can be classed as the typical **Hot and Wet Equatorial Type**, the characteristics of which are as follows:

- Since the sunrays are vertically overhead for almost throughout the year, the **temperature** remains **uniformly high** all through the year. Hence, there are **no seasons** in this belt.
- The duration of sunshine is **12 hours** daily and the average temperature ranges around **25°C–30°C**.
- Humidity** is usually very high in this region, as it receives a high amount of rainfall annually, about **150 cm to 350 cm**, which is well distributed throughout the year.
- Rainfall is of the **convective type**, where it rains every afternoon, around 4 O' Clock, thus, also known as the **4 O' Clock Rain**.
- Temperatures rise very high during the day.
- Land and water get heated.
- Water changes from liquid to vapour and rises with the air.
- On reaching higher altitude, the vapour cools and changes into droplets of water to form clouds.
- Late afternoon, the clouds become heavy with rain drops which come down with thunder and lighting.
- The evenings and nights become cool.



Convectional or 4 O' Clock Rain

Natural Vegetation

These Equatorial Rainforests have developed due to the high temperatures and abundant rainfall that occurs in this belt. These are the world's largest evergreen forests, supporting a huge variety of trees, plants, shrubs and creepers.

- These forests look **evergreen**. This is due to the fact that the several kinds of trees shed their leaves, flower and bear fruit at different times of the year.
- The most distinctive feature of these forests is that the vegetation is found to exist in **three different layers**.



Canopy: This is the topmost layer, where the branches of the tall trees merge with each other forming an **umbrella** or canopy, blocking the sunlight. The tallest trees rise above the canopy to form the **emergent layer**.

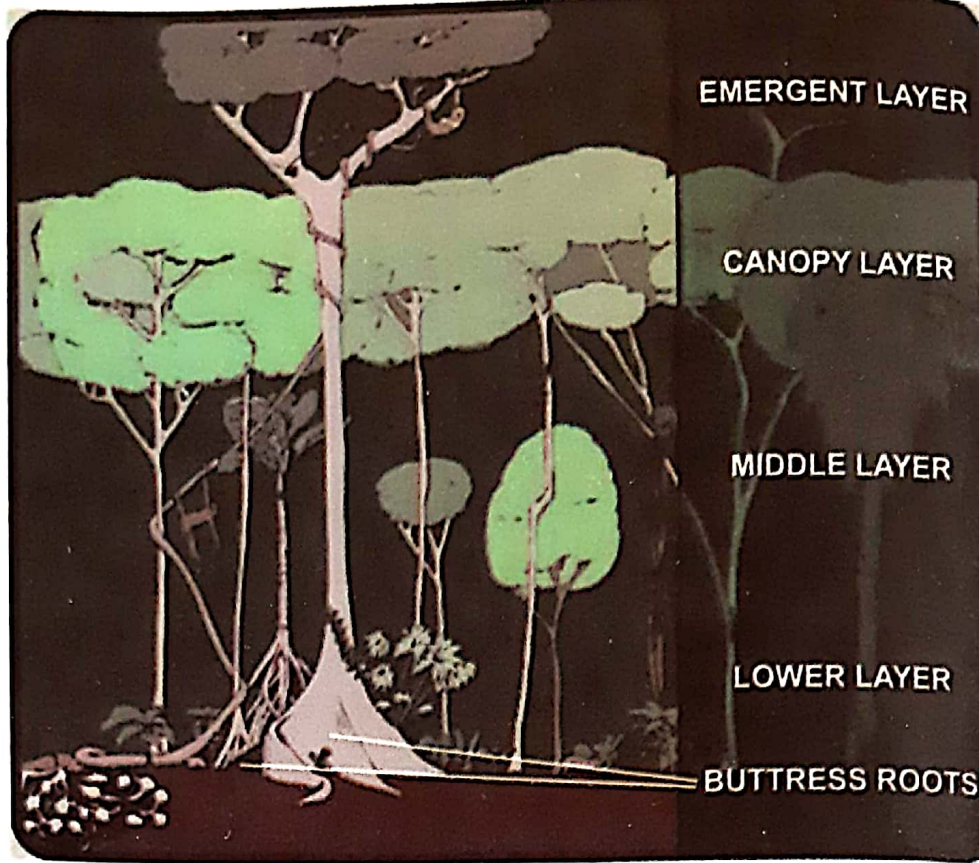
b) **The middle layer:** It consists of small trees, shrubs and plants, which do not have broad trunks.

c) **The lowermost layer:** It consists of grass, ferns, creepers, lianas and colourful orchids.

The ground remains **damp** as no sunlight penetrates and so the inside is **dark**.

The trees are of **hardwood** variety, have **broad leaves**, **spread out branches** and wide bases, called **buttress roots**, to give support to the tall trees.

The important species of trees found here are the **mahogany**, **ebony**, **rosewood**, **cinchona**, **rubber** and **palm**.



The Layered Vegetation



Uses of the trees

- **Mahogany, ebony, rosewood** for making furniture
- **Cinchona** for making Quinine the medicine for Malaria
- **Rubber** for making tyres and other rubber products
- **Palm** for extracting palm oil

□ Answer the following questions.

1. Name the areas where Equatorial rainforests are found.
2. Write two characteristics of equatorial climate.
3. Why Equatorial forest look evergreen?
4. Name the three layers of equatorial rainforest and write a characteristics for each layer.
5. Name three trees found in Equatorial rainforest and write a uses for each.