

Yr 8 Geography – What is the Holocene?

Why am I learning this? The Holocene is the name given to the last 11,700 years of the Earth's history — it is the period of time that humans have had a huge impact on the Earth during this time. You will be able to explain why an estimated 30 percent of plant and animal species may become extinct within the next 100 years. You will be able to apply your learning to explain the dangers faced by the World's Tropical Rainforests (TRFs) and make your own conclusions about whether the TRFs should be developed further or be saved.

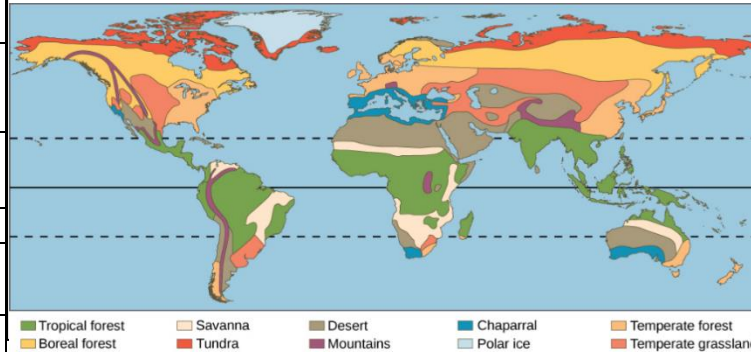
Key Word	Definition
Ecosystem	Any area where living things (plant and animals) and non-living things exist together
Biome	Large ecosystem, such as a tropical rainforest or taiga forest
Weather	The day-to-day conditions of the atmosphere, e.g. temperature, precipitation, cloud cover, etc
Climate	The average weather conditions of an area occurring over many years
Tropical Rainforest	Forest that grows in the constantly hot and wet climate zone near the Equator
Deciduous Forest	Having leaves that fall off in the autumn and grow again in spring
Tundra	An extremely cold, dry biome
Equator	An imaginary line around the middle of a planet
Emergent Layer	Very high trees that grow another ten metres or more above the tropical rainforest canopy
Canopy Layer	The continuous layer of tall trees which shades the forest floor
Forest Floor	Mainly contains decomposing plant material such as leaves, bark, branches, and stems
Leaf Litter	A layer on the forest floor made up of leaves and other dead organic material
Nutrient Cycle	The transfer of nutrients around different parts of an ecosystem
Adaptation	A change which an organism or species makes to become better suited to its environment
Sustainable Development	Development which meets the needs of the present without compromising (limiting) the ability of future generations to meet their own needs

What is a biome?

An **ecosystem** is **an area** where **living organisms** (plants and animals) and **non-living things** (eg lakes/rivers/rocks) **exist and interact** in an environment.

A **biome**: is an ecosystem that covers a **large area** of the world. Each biome **has its own climate** which is **different to other biomes**.

There are many biomes in the World but the **five major types of biomes**: **aquatic, grassland, forest, desert, and tundra** – see the key words

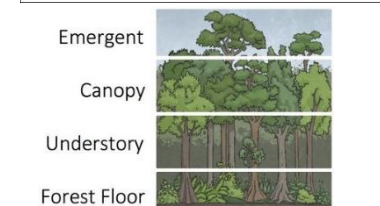
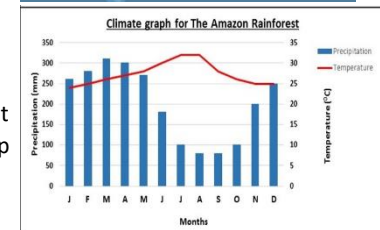
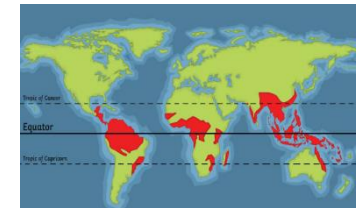


Tell me about the Tropical Rainforests (TRFs)

Location: Tropical rainforests are mainly located along the Equator between the latitudes of 23.5°N (the Tropic of Cancer) and 23.5°S (the Tropic of Capricorn)—the tropics.

Climate: Anywhere on the Equator is the closest part of the Earth to the Sun. The climate of the TRFs is therefore always hot and wet. **WHY?** - because the sun heats up the ground causing air to rise, which then cools and condenses and forms clouds.

Structure: each TRF has FOUR separate layers – see the key words



What are the pressures on the Tropical Rainforests?

In the rainforest many people live sustainably. This means they use the forest for what they need, but do not harm it. The native people such as the Yanomami tribe are an example. They only use things found naturally in the rainforest. They only cut down a small area, so when they leave it will grow back.

Some people use it unsustainably. This means they harm the rainforest. They cut down huge areas of forest for farming, mining, electricity, or roads. The forest can't grow back because the soil is ruined (the nutrients are washed out by the rain).

Some people think we should save the rainforest. They think there are many good things that the rainforest provides. **WHY?**

- there may be cures to diseases like bird flu in the rainforest. If we cut the forest down, we will lose these cures forever
- the people who live in the rainforest will have nowhere left to go. They have lived there for thousands of years and don't want to move
- the animals of the rainforest are sometimes very rare. If we cut down the forest they will have nowhere to live and they could become extinct.

But some other people think the rainforest should be cut down. WHY?

- the rainforest is so huge that cutting down part of it will still leave a lot of rainforests for the people and animals to live in
- the rainforest is taking up land that could be used by people
- the people need to chop down the rainforest so they can have jobs. If they don't chop it down, they won't earn any money and won't be able to feed their families.

