

# Y4 Knowledge Organiser Geography: Climate Zones and Vegetation Belts

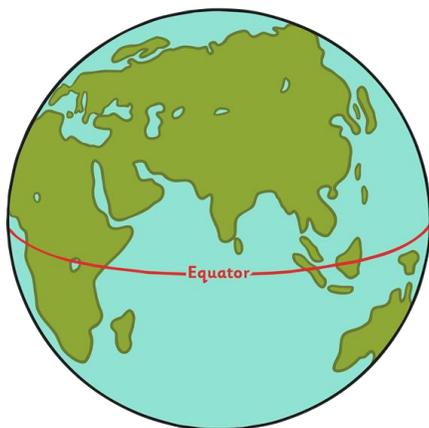
## Climate Zones

The weather changes in different parts of the world. Where there are similar weather patterns this is known as a **climate**.

At the top of the Earth there is an arctic climate and some of the coldest temperatures in the world are found here.

Temperate climates are found a bit further south, and as you approach the equator you find Mediterranean and **desert** climates. Some of the hottest places on Earth are found here, and few people live in this climate.

At the equator there is a tropical climate, and travelling south of the equator it gets cooler again before reaching the Antarctic.



The **equator** is an imaginary line that divides the Earth in half. The equator is an equal distance between the North and South Poles. The weather on the equator is hot all year round. At the equator, day and night are both 12 hours long. The time it takes for the sun to set and rise at the Equator is the fastest on Earth. The change from day to night takes only a few minutes.

## What is a biome?

A biome is a natural area of plants and animals. The world is divided into lots of different biomes and they are all different depending on their climate.

Some biomes are:

Aquatic

Desert

Forest

Grassland

Tropical Rainforest

Tundra



## Key Vocab

<b>Climate</b>	A description of the average weather conditions in a certain place
<b>Equator</b>	An imaginary circle around the middle of the Earth
<b>Continent</b>	A large solid area of land
<b>Biome</b>	Areas of our planet with similar climates, landscapes, animals and plants.
<b>Tropical rainforest</b>	Biome which is hot and wet all year round. They are home to half of all the different types of plants and animals on the planet.
<b>Desert</b>	Dry areas that receive very little rain
<b>Savannah</b>	A biome that is hot all year round with a long, dry season
<b>Grassland</b>	Areas of land that are vast and open, with grasses being the main plants
<b>Tundra</b>	A large, barren region with no trees. The coldest of all the biomes
<b>Vegetation</b>	Plant life as a whole within a certain area

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## Tropical Rainforest

Tropical rainforests are found in Asia, Africa, South America, Central America, and on many of the Pacific islands. They are often found along the equator.

Rainforests are an endangered biome. People have cut the trees and sold the wood for firewood, building materials, and paper. Parts of the rainforest have been burned to make space for grazing and farming.

**Special features** Tropical rainforests have more species of plants and animals than any other biome. Many of the plants used in medicine can only be found in tropical rainforests.

**Animals you might find** Anteater, jaguar, brocket deer, lemur, orangutan, marmoset, macaw, parrot, sloth, and toucan

**Plants you might find** Bamboo, banana trees, rubber trees, and cassava.



*Animals like the Philippine Tarsier are under threat due to the rainforests being cut down and burned*

## Savannah

The savannah is hot all year round with a long, dry season

The savannah biome is mostly made up of grass but there are a few trees.

The largest part of the savannah biome is located in Africa. Almost half of Africa is considered a savannah

**Special features** Because of the availability of grass in the savannah, there are many grazing animals who take advantage of this abundant food supply.

**Animals you might find** elephant, zebra, gazelle, buffalo, wildebeest, giraffe, lion, hyena, cheetah

**Plants you might find** Lemon grass, Rhodes grass, Bermuda grass, acacia tree, baobab tree

## Fires in the Savannah

Fires are an important part of the savannah. During the dry season fires clear out old dead grass and make way for new growth. The trees have thick bark which helps them to survive. The animals generally can run to escape the fire. Some animals burrow deep into the ground to survive. Insects generally die by the millions in a fire, but this provides a feast to many birds and animals.

## Desert

A desert is an area where little or no life exists because of a lack of water. Scientists estimate that about one-fifth of the earth's land surface is desert.

Deserts can be found on every continent except Europe.

There are two different kinds: hot and dry (such as the Arabian and Sahara deserts) and cold and dry (such as Antarctica and the Gobi desert).

**Special features** The lack of water and intense heat or cold make this biome inhospitable to most life forms.

**Animals you might find** A few animals—mainly reptiles, like snakes and lizards, and amphibians, like frogs and toads—are well adapted to the hot desert.

**Plants you might find** Most of the plants you'll see in the desert are species of cactus.

