



# Our Changing World

## What are biomes?

Biomes are areas of our planet with similar **climates, landscapes, animals** and **plants**. What lives in each biome depends on:

- how warm or cold it is
- how dry or wet it is
- how fertile the soil is

The animals in a biome depend upon plants for food. The plants in a biome often also depend upon the animals for spreading pollen and seeds so that new plants can grow. So both plants and animals rely on each other to stay alive.

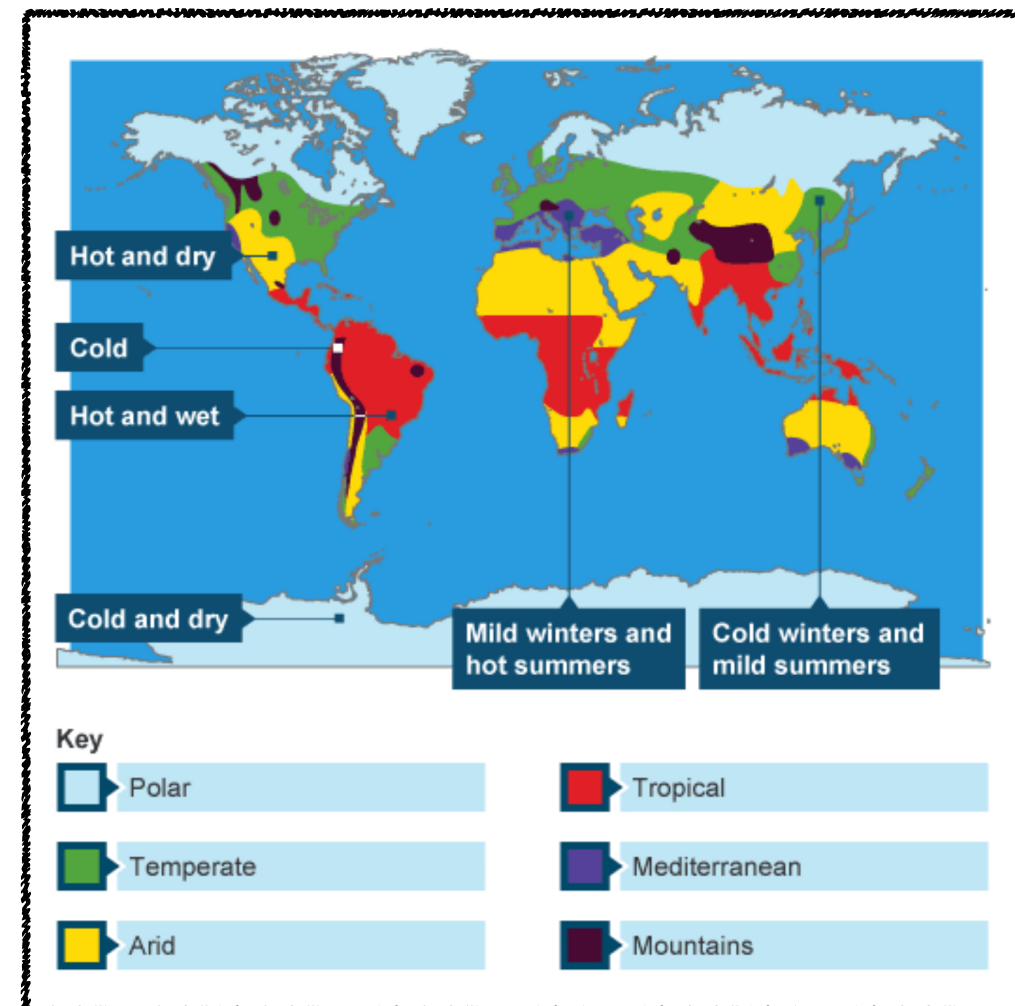


## What is the difference between weather and climate?

**Weather** describes the day-to-day conditions of the atmosphere. Weather can change quickly - one day it can be dry and sunny and the next day it may rain.

**Climate** describes average weather conditions over longer periods and over large areas.

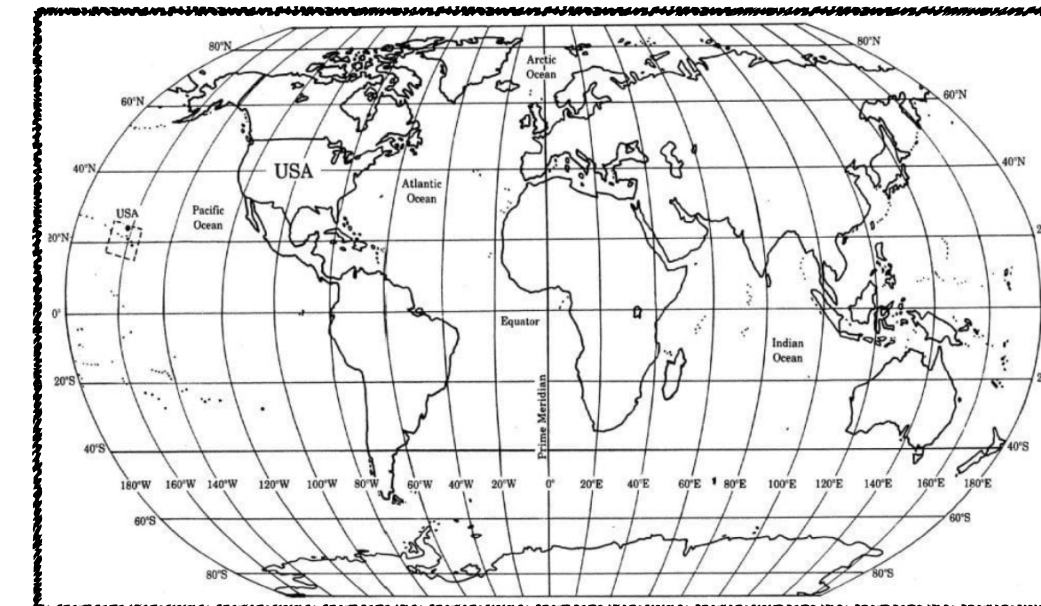
The table below shows the world climatic zones.



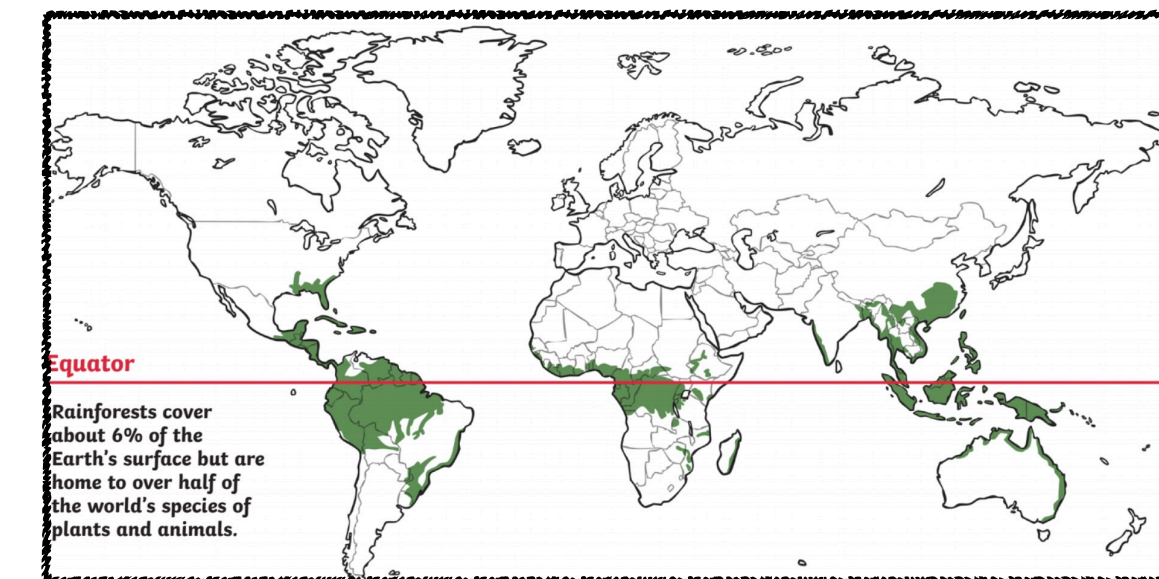
## What is latitude and longitude?

To help locate where a place is in the world, people use imaginary lines:

- To find out how far **north** or **south** a place is, lines of **latitude** are used. These lines run parallel to the Equator.
- To find out how far **east** or **west** a place is, lines of **longitude** are used. These lines run from the top of the Earth to the bottom.



## Where are the tropical rainforests?



## Types of biome

Tropical **rainforests** are hot and wet all year round. They are home to half of all the different types of plants and animals on the planet.

**Deserts** are hot and dry all year round. The only things that grow are cacti and small shrubs because the soil is shallow and rocky. Animals come out at dusk when it is cooler.

The **savannah** is hot all year round with a long, dry season. Only grasses and shrubs grow here but it is home to lots of different types of animals such as elephants, zebras and wildebeest.

**Woodlands** are habitats where the main plants found are trees, but mosses, ferns and lichen can also be found. The climate is warm and mild, with more rain falling in the winter than the summer.

**Grasslands** are areas of land that are vast and open, with grasses being the main plants. The largest grasslands are found in East Africa. Zebras, giraffes, elephants and rhinos can all be found living in grasslands.

The **tundra** is the coldest of all the biomes. There is very little rain or snow and the temperatures are freezing. Winters are long and summers are short. Part of the soil is frozen all year round, although the top part defrosts in summer and plants such as mosses can grow.

## What is trade?

Buying and selling things is called trade.

Trade is an important way for countries to make money and has been happening across the world for hundreds of years.

Today, goods are carried around the world in container ships from port to port and by aeroplane.



## What Is Fairtrade?

The Fairtrade Foundation was established in 1992. It aims to give farmers in poor communities around the world a better deal. By becoming a Fairtrade farmer or worker, you can:

- Plan for the future because you have a regular income.
- Own 50% of the business, giving you an equal voice in decision making.
- Larger plantation companies must protect workers' rights, keeping them safe and healthy.

**Fairtrade Premium** is an additional sum of money, which goes towards developing the farming community, protecting the environment farmers live and work in.

**Fairtrade Price** is a guaranteed minimum price for goods, which covers the cost of sustainable production and provides a good standard of living.

## Climate change

The climate across the world has changed naturally over thousands and millions of years. In the past, the UK has experienced both freezing **ice ages** and warm **tropical** climates.

Today however, because people have been burning **fossil fuels** to power homes, factories and vehicles, more **carbon dioxide** has entered the Earth's atmosphere.

Carbon dioxide acts like a **greenhouse**. It lets the sun's rays through to heat up everything inside the atmosphere, but stops the heat from escaping. This is making our planet warm faster than it naturally would and is causing world climates to change.

## Export and import

People in the UK can **sell** things they make when people in other countries want them. This might be because they can't make them themselves or because they are cheaper or better quality.

Sending **goods** like this to other countries is called **export**.

There are also things, such as bananas or oranges, that are hard to grow in the UK and we have to **buy** these things from abroad.

This is called **import**.

Sometimes countries need experts from abroad such as engineers, scientists or teachers. These experts can sell their **services** to people around the world and this is called a **service industry**.

The service industry is the UK's main industry today and we import more goods than we export.

## Where Can You Find Fairtrade Organisations?

Fairtrade works in 74 countries across 4 continents.

