



TOPIC NAVIGATOR

GEOGRAPHY

YEAR 5



CLIMATE ZONES

KEY FACTS

- 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. At the equator there is a tropical climate, and travelling south of the equator it gets cooler again before reaching the Antarctic.
- An area of the planet characterised by certain flora (plants) due to climatic conditions is called a **Vegetation Belt**.
- A community of animals, plants and microorganisms, together with their habitat is called an **ecosystem**. We can group ecosystems into categories called **biomes**. The most commonly accepted biomes that exist on the Earth are Tundra, Desert, Grassland, Tropical Rain Forest, Deciduous Forest, and Coniferous Forest. Though there is some debate among scientists as to exactly how biomes should be classified.
- Geographers use tools such as **longitude and latitude** to create two-dimensional atlases of our three-dimensional planet. Lines of latitude circle the Earth in an east-west direction. They are parallel. Lines of longitude run from the top of the Earth to the bottom. They are not parallel as lines of latitude are - they meet at a point at the north and south poles and are called meridians. They divide the Earth into segments, like an orange.
- As the Earth rotates on its axis, the Sun shines on only one part of the Earth at a time. While the sun shines where you live, it's night time somewhere else. When you're eating your breakfast cereal, children in Paris are finishing the school day and children in Moscow are eating dinner. Children in Bangkok are going to bed and children in Sydney, Australia are getting up for the next day.
- It wouldn't make sense for us to be on the same time. Instead, countries all over the world are divided into **time zones**, based loosely on longitudinal bands.

ONLINE RESOURCES AND BOOKS

- <https://www.bbc.com/bitesize/guides/ztqtyrd/revision/1>
- <https://kidsgeo.com/geography-for-kids/longitude/>
- https://www.ducksters.com/science/ecosystems/world_biomes.php

NATIONAL CURRICULUM AIMS

- interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems
- describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts

TOPIC VOCABULARY

Climate - The long term weather conditions of an area

Climate Zone - divisions of the Earth's **climates** into general **climate zones** according to average temperatures and average rainfall.

Biome - a large naturally occurring community of flora and fauna occupying a major habitat, e.g. forest or tundra.

Vegetation belt - Plant life as a whole within a certain area.

Latitude - An imaginary circle drawn parallel to the equator.

Longitude - Distance measured in degrees east and west of the Prime Meridian.

Equator - The great circle of the earth, equidistant from the poles, dividing the Northern and Southern hemispheres.

Hemisphere - Half of the terrestrial globe, dividing into northern and southern hemispheres by the equator

Tropics of Cancer - Line of latitude 23.5° N of the equator. Between the tropics tropical rainforests are common.

Tropic of Capricorn - Line of latitude 23.5° S of the equator. Between the tropics tropical rainforests are common.

Prime/Greenwich Meridian - The Prime Meridian is an imaginary line that, similar to the equator, divides **the earth** into eastern and western hemispheres. It is sometimes referred to as the **Greenwich Meridian**.

time zones - A region throughout which the same standard time is used. There are 24 time zones in the world, demarcated approximately by meridians at 15° intervals, an hour apart.

OTHER USEFUL VOCABULARY

Physical geography, Human geography, Arctic and Antarctic Circle, ecosystem