

# The Natural World

## Volcanoes and Tectonic Plates

### Year Six Knowledge



The structure of the Earth comprises of the crust, mantle, outer core and inner core. The crust and upper part of the mantle are broken into tectonic plates.



Earthquakes are formed when tectonic plates slowly move over a long period of time. Sometimes, the edges, which are called fault lines, can get stuck, but the plates keep moving. Pressure slowly starts to build up where the edges are stuck and, once the pressure gets strong enough, the plates will suddenly move causing an earthquake.



Scientists, known as seismologists, use the Moment Magnitude Scale (MMS) to determine the magnitude (strength) of an earthquake. The MMS measures the total energy of an earthquake, called the seismic moment



Tsunamis occur when an earthquake happens underwater. This causes shockwaves which disturb the water and create a giant wave or series of waves.



The Earth is made up of several different layers. Underneath the crust is the mantle which is made up of semi-molten rock.



Sometimes this rock becomes so pressurised that it turns into a liquid called magma. When the pressure becomes too great, the magma explodes through vents in the crust as lava. Toxic gas and ash are also released. These vents are volcanoes.



Climate change refers to the process of our planet heating up. This will impact people and wildlife globally as some could find they are unable to adapt.



Climate change can make weather more extreme and unpredictable. It is a serious problem that needs to be tackled.

# The Natural World

## Climate Zones and Biomes

### Year Six Knowledge



The world can be divided into biomes. A biome is a large but specific geographical area with a particular climate, types of plants (flora) and types of animals (fauna). It is different to an ecosystem which is the interaction of living and non-living things in an environment.



There are five major types of biomes: aquatic, grassland, forest, desert, and tundra, though some of these biomes can be further divided into more specific categories, such as freshwater, marine, savanna, tropical rainforest, temperate rainforest, and taiga.



The rainforest biome is hot and wet all year round. They are home to half of all the different types of plants and animals on the planet.



The desert biome is dry all year round. Only a few plants might grow, such as small shrubs or cacti, because the soil is shallow and rocky. Animals come out at dusk when it is cooler.



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



The woodland biomes 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 in the summer.



The grassland biomes are areas of land that are vast and open. Grasses are the main plants. The largest grasslands are found in East Africa. Zebras, giraffes, elephants and rhinos all live 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.

# Windrush

## Year Six Knowledge



The Caribbean is a region that consists of the Caribbean Sea, over 700 islands, islets, reefs and cays and its surrounding coast. Europeans began colonising the islands in the 15th century, in search of gold and silver though there was little to be found



By the 17th century, the four main colonial powers in the Caribbean were the Spanish, English, French and Dutch, all of whom had gone in search of wealth. Those under British Rule formed part of the British Empire which spanned the globe..



The rise in slavery drastically changed the demographic of the Caribbean, making the African population the new majority. The Slavery Abolition Act of 1833 made the purchase and ownership of slaves in the British Caribbean islands was made illegal.



Establishment of The British Commonwealth of Nations where countries that were formally colonised were now recognised, as stated in the Balfour Declaration of 1926.



The British Nationality Act of 1948 allowed all British subjects the right to travel and settle in the UK. This, together with British government campaigns in the Caribbean, led to a wave of immigration.



In 1948 the ship the Empire Windrush undertook the 8000 mile journey from the Caribbean to London. London was the most popular place for the people to settle but they also settled in Liverpool, Birmingham and Manchester. Many gave no destination for future residence.



To stem the flow of migrants, the British government passed various immigration acts in 1962, 1968 and 1971 in effort to discourage mass migration. Only those with work permits or those who had relatives already in the UK were permitted to enter the country and only certain subsets of the Commonwealth were allowed to live in the UK permanently..



It is estimated that nearly half a million people migrated from the Caribbean between 1948 and 1970.

# Year 6

## Geographical Skills



I can use 8 figure references to identify countries and cities in the world, the main mountain ranges and the longest rivers.



I can explain the climates of given countries in the world and relate this to knowledge of the hemispheres, the Equator and the Tropics.



I can select the most appropriate map for different purposes eg an atlas to find a country, Google Earth to find a village etc.



I can locate major cities of the world and draw conclusions as to their similarities and differences



I can use maps to identify longitude and latitude.



I can locate the Caribbean and describe its climate. I can talk about the differences and similarities between Jamaica and England.



I can discuss how Windrush changed land use and economic activity and how natural resources were used in the UK.



I can describe and explain the processes that cause natural disasters.



I can draw conclusions about the impact of natural disasters through the study of photographs, population numbers and other primary sources.



I can suggest questions for investigation and analyse results and draw conclusions.



I can report on the effects of environmental change on themselves and others.



I can carry out a role-play where pupils look at the issue of levels of immigration during Windrush from different viewpoints, making presentations to represent different points of view.

# Year 6

## Geographical Skills



I can select methods for collecting, presenting and analysing data.



I can analyse evidence and draw conclusions.



I am aware of own responsibility in the world.



I can research and understand key aspects of physical and human geography.