Subject: Geography

Year: 5: Climate Zones & Tectonic Plates

National Curriculum objectives

Can describe and understands key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

To begin this unit, the children should have already learnt:

Used geographical vocabulary to describe the physical attributes of an area. (Y4)

Used atlases and Google Maps to identify and label capital city, mountain range, significant rivers and regions. (Y4)

Montserrat is a British Overseas Territory in the Caribbean. It hosts many volcanoes. (Y4)

The learning in this unit will prepare the children to learn these things in the future:

Europe is in the northern hemisphere (Y6)

Know and recognise the flags of a number of European countries and understand the concept of a national identity. (Y6)

Know significant environmental regions and their physical characteristics (Y6) Know and state the locations of some of the major cities in Europe (Y6) Know the location of the meridian line and to have an understanding of the extent to which times vary across the continent. (Y6)

Key Enquiry Question

How does the physical environment effect people's lives?

To achieve ARE, pupils will need to be secure in the following knowledge:

By the end of this unit, children will know:

- The nature of the different climate zones around the world: The polar zones, the temperate zones and the tropical zones ((making A link to Y4 knowledge about Madrid's climates).
- •That climates become more varied in locations further from the equator and can be affected by different factors, such as elevation.
- •That climate change has occurred naturally over millions of years but is now being influenced negatively by human activities.
- What the greenhouse effect is and which gases are involved (cross-curricular: science).

Vocabulary

Climate zones

Tectonic lates

Water cycle

Climate change

Weather

Biomes

Volcano

Cryptography

Greenhouse Gas

Earthquake

Habitat

The impact of	climate change on the di	fferent climate zones
worldwide.		

- •That a biome is a large-scale ecosystem defined by its climate, temperature, soil type and water.
- The main biomes and their features: desert, tundra, tropical, taiga/deciduous forest, grasslands, coral reefs and mountainous.
- As elevation increases the type of vegetation found on land will change from deciduous forest to grassland to ice and snow.
- Of the water cycle in the context of the water cycle in a geographical context and the processes, including condensation, evaporation, percolation, run-off and precipitation.
- •That earthquakes are caused by different types of movement in the earth's tectonic plates.
- That volcanoes are caused when magma rises to the surface of the Earth, which causes bubbles of gas to appear in it. This gas can cause pressure to build up beneath the surface, and it eventually explodes.
- That earthquakes are most likely to happen in the Ring of Fire around the edge of the Pacific plate

By the end of this unit, children will be able to do:

Use ordnance survey resources

https://www.ordnancesurvey.co.uk/mapzone/geography/weath erand-climate/page-eight to verify predications about the climate in a specific location according to its geographical location.

- Label the different climate zones and biomes around the world using geographical knowledge to identify which countries are in which zones/biomes.
- •Used atlases to identify where the Andes and other mountain ranges are and predicted what their climate will be.

Temperature Ecosystem

Resources:

Google maps

https://www.ordnancesurvey.co.uk/mapzone/geography/weath er-and-climate/page-eight to verify predications about the climate in a specific location ac

•Compared and contrast the two ways of measuring earthquakes - the Richter and Mercalli scales.	
• Identify and describe which countries are most likely to experience earthquakes based on their geographical knowledge.	
Make connections between their geographical understanding and their knowledge of scientific changes of state.	
•Give the location of places of geographical interest (including those represented by maps with symbols) using four and six-figure grid references.	
Problems and misconceptions:	