Geography **Year 6** **Autumn 2**

Extreme Earth
Topic Key Question: Could we experience a natural disaster in England?

NC objectives covered:

- Describe and understand key aspects of physical geography, including climate zones.
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions.
- Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).
- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Prior Knowledge needed:

- A basic understanding of climate and hot and cold countries.
- An understanding of the equator
- An understanding of what a natural disaster is.
- An understanding of physical geography, including: rivers, mountains, volcanoes and earthquakes, and the water cycle.

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Learning in this topic:

General geographical knowledge, position and significance

- The children will explore the question 'Could we experience a natural disaster in England?' by first exploring the types of natural disasters experienced around the world. They will identify and locate **climate zones (polar, temperate, Mediterranean, desert, tropical), tectonic plates, biomes and weather patterns**. They will consider why some countries/ continents experience more natural disasters than others and consider the effect of locations around the world.
- The children will explore the different types of natural disasters (**earthquake, hurricane, tornado, draught, volcan eruption and flooding**) and consider how these are caused and the locations where they are most and least likely.
- The children will learn about the difference between weather and climate. They will identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

Place knowledge

- The children will locate different countries and continents around the world and explore their **climate zone** and relation to the equator and **tectonic boundaries**.
- The children will compare the location of the UK to the location of countries that experience a high number of natural disasters (United States, Indonesia, China, Philippines).

Human and physical geography

- The children will apply their knowledge of rivers and mountains to explore how **human and physical geography** impact **climate change** and **natural disasters** and recognise that physical and human processes interact to influence and **change landscapes, environments and climates.**
- They will look at data that shows an increase in natural disasters around the world and compare this with data of **rising sea levels, temperatures, CO2 emissions.**
- The children will explore the cause and effect of the **green house effect** and recognise that considerations of **sustainable development** affect the planning and management of environments and resources.
- Through debate the children will consider how conflicting demands on the environment may arise and describe and compare different approaches to **managing environments.**
- Through research, data and fieldwork the children will consider the impact the climate change is having and consider this in relation to **natural disasters and extreme weather.**

Geographical and fieldwork skills

- The children will use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
- The children will explore data to make observations of climates and the effects of human and physical geography on lacations.

Curriculum Concepts and Themes:

- Weather patterns
- Climate
- Climate zones
- Sustainability
- Natural disasters
- Cause and effect

Curriculum Skills Progression:

- Extend and deepen locational knowledge and spatial awareness of the world's countries and environmental regions, including polar and hot deserts.
- Recognise that physical and human processes interact to influence and change landscapes, environments and climates.
- Describe the ways in which physical and human processes operating at different scales create geographical patterns and lead to changes in places.
- Recognise the many links and relationships that make places dependent on each other.
- Recognise how conflicting demands on the environment may arise, describe and compare different approaches to managing environments.
- Recognise that considerations of sustainable development affect the planning and management of environments and resources.
- Understand the key processes in physical geography relating to geographical timescales and plate tectonics, weather/weathering, climate and climate change, glaciation & coasts.
- Recognise that the environment in the place and the lives of the people who live there are affected by actions and events in other places.
- Use Geographical Information Systems (GIS) to view, analyse and interpret places and data.

Direct links to made other subjects:

English – Environmental poetry to be explored in reading lesson.
Persuasive writing and letter writing.

Art – natural disaster art prints.

Inspirational Start:
(hook to capture the imagination)
Children are to research and explore natural disasters through video footage considering how they are formed and the effect they have on communities.

Mid-way Milestone:

Create shoebox models to demonstrate the greenhouse effect.

Extraordinary End:
(a recognised end point to work towards)

Write a letter to a local MP to explain what they have learnt, explain their opinions, and find out what is being done locally to support sustainability efforts.

Geography **Year 6** **Spring 2**

Rivers

Topic Key Question: Why are rivers important to life on Earth?

NC objectives covered:	• understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time • physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle • name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers)
Prior Knowledge needed:	• Knowledge of locations in the UK and around the World. • Understanding of how the water cycle works. • Understanding of landforms (hills, mountains, plains)

Learning in this topic:

General geographical knowledge, position and significance

- Learn about the journey of the river from **source** to **mouth.**
- They will develop a good understanding of how rivers are formed and how they develop from source to mouth. It will also cover different **landforms** that rivers may pass through on this journey (Eg. the formation of **gorges, meanders, oxbow lakes**).
- They will also learn how rivers are linked to the water cycle and the role that the **water cycle**. This will provide links to the climate and how that being affected will have an impact on the weather and water levels.

Place knowledge

- Look at rivers in the UK and map out where each river is. In depth, look at the journey of the River Severn from source to mouth and the parts of the UK that it covers.
- Researching a specific river from each continent: the children will need to know where each continent is and can discuss what they know about the continent and whether they know any famous rivers from these. Children will then narrow this down to an individual country and river. This will provide the children with knowledge of the location of famous rivers around the World as well as analysing on the human geography of how each river is significant for its location and how it is used as a **natural resource**.

Human and physical geography

- Discover the role in which rivers are used in different countries.
- Look at flooding and the role that human development has had on it. Why are areas more susceptible to flooding? What flood defences do places have in places already? What impact do flood defences have on the local environment and the sustainability of land.
- Creating and designing our own flood defences to help the places worst affected in 2020 floods.

Geographical and fieldwork skills

- Locating countries and continents on the maps and the rivers within these.
- Designing flood defences after researching the different types that are used.
- Discuss what investigations that you may be able to carry out with rivers.
- Map out the routes of rivers using 6 figure grid referencing and explore the distance between locations via the river and the most direct route.

Curriculum Concepts and Themes:	• Source of the river • Flood plains • Flood barriers • Estuary • River mouth • Meander • Gorge • Land use • Sustainability	**Curriculum Skills Progression:**	• Recognise that physical and human processes interact to influence and change landscapes, environments and climates. • Build on knowledge of globes, maps and atlases and apply knowledge routinely both in the classroom and the field. • Understand the key processes in physical geography relating to geographical timescales and plate tectonics, weather/weathering, climate and climate change, glaciation & coasts. • Recognise that the environment in the place and the lives of the people who live there are affected by actions and events in other places. • Recognise how conflicting demands on the environment may arise, describe and compare different approaches to managing environments. • Recognise that considerations of sustainable development affect the planning and management of environments and resources. • Locate places worldwide using six figure grid referencing. • Map a range of routes toworldwide locations.Identify the most direct, cost effective shortest route between two points or locations. • Create maps using appropriate scales and six-figure grid referencing.	**Direct links to made other subjects:**	Science – The Water Cycle: Covering how this is linked to the system of rivers. Habitats: Looking at how animals use the rivers. History – How rivers have been used in the past: Look at how rivers have been used in Britain to support the development of the country. Art – Creating texture in art - water project. IT – Research skills: Children will be required to find and select suitable information for the tasks.

Inspirational Start:

Source to Mouth Video: Children then have an opportunity to recreate the journey either through a picture, diagrams or a model.

Mid-way Milestone:

Creating and designing our own flood defences.

Extraordinary End:
(a recognised end point to work towards)

Describing why rivers are essential in Britain and what their role has been throughout history and for the modern day.

Geography **Year 6** **Summer 1**

Mountains
Topic Key Question: How does the formation of mountains impact Earth?

NC objectives covered:

- Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.
- describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

Prior Knowledge needed:

- Some idea of the structure of the Earth and plate tectonics.
- Know what mountains and volcanoes are.
- Can locate the continents on a map.
- Can locate specific countries on the World map.
- An understanding of climate.

Learning in this topic:

General geographical knowledge, position and significance

- Use of maps to locate plates and mountains around the World.
- Analyse and interpret data from different mountain ranges and explore contrasting locations.

Place knowledge

- Locate plate boundaries
- Locating continental and oceanic plates.
- Analyse why Britain does not have severe earthquakes.
- Locate famous mountain ranges and mountains.
- Looking at specific **plate boundaries** to see why different events occur.
- Research and explore data from the Rockies, the Andes and the Himalayas and compare the data such as temperatures, heights, rain fall etc

Human and physical geography

- Explaining how the five different types of mountains are formed: **fold, fault-block, dome, volcanic and plateau.**
- Explain how the Earth is structured with information about each of the four layers (Inner Core, Outer Core, Mantle and Crust)
- Discuss the different types of plate boundaries (**Convergent, Divergent, Transform**) and the effects that movement in these plate boundaries can cause.
- Analyse how the climates change from sea level as you climb a mountain.
- Explain the formation of **volcanoes** and how the process of an eruption. We will also analyse the impact that these **eruptions** can have.

Geographical and fieldwork skills

- Plot mountain ranges and famous mountains onto a World Map using atlases.
- Ability to discuss different locations and their risk of **tectonic activity.**
- Use map work in contrasting locations to collect, analyse and draw conclusions from geographical data.

Curriculum Concepts and Themes:

- Mountains
- Climate
- Plate Tectonics
- Earth Structure
- Plate boundaries
- Continents
- Earthquakes
- Volcanoes
- Tsunamis

Curriculum Skills Progression:

- Understand the key processes in physical geography relating to geographical timescales and plate tectonics, weather/weathering, climate and climate change, glaciation & coasts
- Draw on own knowledge and understanding, suggest relevant geographical questions and issues and appropriate sequences of investigation Use multiple sources of increasingly complex skills and sources of evidence and use effectively.
- Build on knowledge of globes, maps and atlases and apply knowledge routinely both in the classroom and the field.
- Present findings in a coherent way and reach conclusions that are consistent with evidence.
- Use mapwork in contrasting locations to collect, analyse and draw conclusions from geographical data.

Direct links to made other subjects:

English: Explanation text on how a volcano erupts.

DT: Designing and making a thermos flask that could be used on a mountain expedition.

Maths: Comparing the size of different mountains and discussing different units of measure. Analysing data collected from different mountain ranges and comparing them.

Inspirational Start:
(hook to capture the imagination)

Google expeditions exploring different mountainous scenes.

Mid-way Milestone:

Physical demonstration of how the five different types of mountains are formed using a range of materials. Each group will become 'experts' in one form and present to the rest of the class.

Extraordinary End:
(a recognised end point to work towards)

Making volcanoes and getting these to erupt.
Creating flask insulators for a mountain expedition.