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Global Enquirers

Medium Term Plan: Global Enquirers- Geography

How do physical processes affect people and their environment? (mountains and volcanoes)

Global Enquirers

Aspect of Study

Locational knowledge
Geographical study
Human and physical geography

Transferable Knowledge

Locational knowledge, chronology, using geographical sources, vocabulary.

National Curriculum Overview of Programme of Study

A high-quality geography education should inspire in pupils a curiosity and fascination about the world and its people that will remain with them for the rest of their lives. Teaching should equip pupils with knowledge about diverse places, people, resources and natural and human environments, together with a deep understanding of the Earth's key physical and human processes. As pupils progress, their growing knowledge about the world should help them to deepen their understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments. Geographical knowledge, understanding and skills provide the frameworks and approaches that explain how the Earth's features at different scales are shaped, interconnected and change over time.

The national curriculum for geography aims to ensure that all pupils: develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes 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 are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS) communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

During this area of study students should be taught to:

- 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, key physical and human characteristics, countries, and major cities
- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region in a European country,
- Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water
- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

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Key Concepts

Population- familiar and different places and people (population, settlement, migration, diversity)

Navigation- use atlases and maps to recall knowledge of place (interpreting a key/symbols, index, compass points, equator, grouping countries into continents, borders, Google maps, making a map)

Climate and Landscape- weather, rainfall, seasons, temperature, desert, polar, temperature, tropical.

Physical features- Understanding of formation of Earth's physical features and common processes (water cycle, rainfall, mountains, island, tides, seas, rivers, tsunami, oceans, mountains, hills)

Human features- Understanding of how the earth has been affected by humans and a resolve to alter their behaviour (harbour, shops, town, village, school, community, climate change, sustainability)

Written and Oral expression- Using geographical terminology, comparison, contrast, recall explaining processes, fieldwork, presenting data, describing trends and patterns.

Possible Misconceptions

Pupils are very likely to view mountains as they are seen now – seemingly static and stable – and often have difficulty believing that rocks can change over time. Even if they can conceptualise that change happens, it is another giant step to grasp this in terms of millions of years. It is hard for any of us to visualise that the Highlands of Scotland were probably higher than the present-day Himalayas when they were formed on the mega-continent of Pangea.
Volcanoes are a type of mountain but despite what many children might say they are not randomly distributed, are not only found on land or in hot climates, do not all erupt violently and can definitely be devastating without producing a single lava flow!

- **That the earth is flat and you can 'fall off it' if you are in different parts e.g. the South Pole.**
- **Pupils may be used to seeing a world map with the U.K in the middle – ensure they are exposed to maps that have different positioning (Google Earth is a good way to do this) so that they understand that the Earth is a sphere.**
- **Vocabulary – explicitly teach and recap geographical vocabulary.**
- **Confusion between continents/countries.**

Knowledge and Skills

- To know the number of people who live in a place is called its population.
- To be able to recall the 7 continents and locate them (RECAP)
- To be able to recall the 5 oceans and locate them (RECAP)
- To be able to locate the equator and tropic lines on a map.
- To know that countries are separated by borders.
- To be able to recall their 'mental map' of the location of countries studied.
- To be able to interpret a key.
- To understand the structure of the earth.
- To know that tectonic plates sit on top of a layer of molten lava and it is how these plates interact which forms mountains and volcanoes.
- To explain what some of the effects of a volcanic eruption would be and look at these in a specific context/example.
- To be able to use geographical terminology to express their ideas orally and in written form.
- To compare Mount Everest and Ben Nevis.
- To understand and be able to describe how the Sherpas live their lives in mountainous areas.

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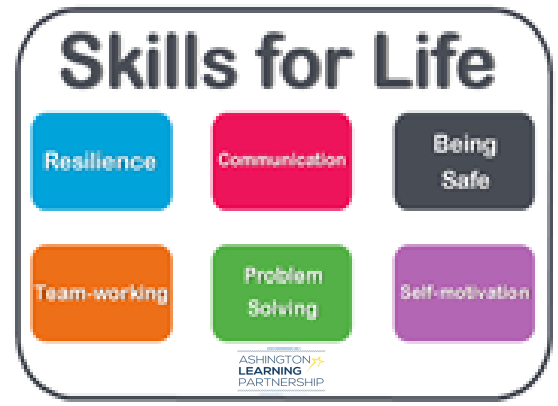
Real World Links/Influential Figures:

Holidays - have any pupils visited any of the towns or countries studied.
Place names - are there any places where we live that have names that suggest they were Roman settlements.

Pliny the Elder



Communication – understand and respect that people have different views.
Team-working – respect and listen to others, use the strength and skills of others.
Opportunities to apply Skills for Life during enquiry learning lessons.

Useful Resources/Wider Reading

https://www.geography.org.uk/teaching-resources/investigating-mountains-volcanoes

https://www.rgs.org/schools/teaching-resources/mountains,-volcanoes-and-earthquakes/

https://cornerstoneseducation.co.uk/the-hub/

OPAL links

Curriculum Coverage

(Previous, expected and what follows on)

Prior National Curriculum Coverage	National Curriculum Coverage	Subsequent National Curriculum Coverage
● Identify daily weather patterns. ● Begin to use maps. ● Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features - **school environment/local area** ● Devise a simple map; and use and construct basic symbols in a key. ● Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment. ● Use simple compass direction - **journey of explorers** ● **YR 3 -** 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), and land-use patterns; and understand how some of these aspects have changed over time-**Roman settlements/town names** ● Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom. ● Use basic geographical vocabulary to refer to key physical features, including: - beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather key human features, including: - town, village, factory, farm, house, office, port, harbour and shop.	● Locate the world's countries, using maps to focus on Europe (including the location of Russia),concentrating on their environmental regions, key physical and human characteristics, countries, and major cities- **comparison of Britain and Italy.** ● Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region in a European country - **comparison of Mount Everest and Ben Nevis** ● Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water- **mountains and volcanoes** ● 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, key physical and human characteristics, countries, and major cities **- continents and oceans, the U.S.A (Year 4), Europe - Anglo Saxons/Vikings** ● identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn. ● describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water - **natural resources (Yr 4) and energy sources** ● 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 - **land in Norway/Denmark and comparing to the U.K, human and physical geography of the U.S.A including climate zones and biomes.** ● describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water - **types of settlement, climate, biomes (yr 4)** .

Language Plan

Key vocabulary	Concepts	Speaking and Listening
volcano mountain mountaineer tectonic plates crust mantle summit location terrain boundary archaeologist continent country tropics ocean border structure eruption layers	human features physical features	ORACY FRAMEWORK STRANDS

Sequence of Teaching and Learning

1 Baseline spider diagram to be completed before the start of unit to inform planning.

If children don't know anything for some of the sections they can write 'I don't know anything' or they can write their own question about what they want to find out.

2 LAUNCH – ENGAGE –History Planning Become archaeologists, discovering the ashen casts of Pliny and the Pompeii bodies.

***Locational knowledge** - continual reference to world map throughout and discuss the countries they have studied previously, their location, relative size, distance from where they live, continents, northern/southern hemisphere, longitude, latitude.

1	**LO: To identify the different layer of the Earth.**	Use models, diagrams and videos to find out bout the Earths layers. Record their findings as a labelled diagram. Pupils can develop this further by including information and explanations about the different layers.
2-3	**L.O. To explain how different types of mountains are formed.**	Pupils should be able to name and explain how the 5 different types of mountains are formed. Use videos and animation to help with the explanations. BBC bitesize has some good examples. Pupils can also build the different types of mountain out of playdough. Pupils then match up a photograph of each type of mountain, a diagram and explanation. **Success criteria:** • Match a simplistic explanation to the photograph and diagram and explain verbally. • Match a more in depth explanation of how each mountain is formed. • Write their own explanation of how each mountain is formed.

Sequence of Teaching and Learning

3	**LO: To locate volcanos and mountain ranges using maps and atlases.**	Using a world map or atlas, identify the location of some of the main mountains and mountain ranges are (Mount Vesuvius, Rockies, Andes, Alps, Himalayas, Pyranees). Record these mountains on their own world sketch map. **Success criteria:** • Locate and Stick labelled photographs of each mountain range. • Create a key of the different mountain ranges and draw them on a world map. • Include labels of the continents they are in and any other significant geographical features around it.
4-5	**LO: To explain the effects of a volcanic eruption.**	Recap and explain how volcanos are formed and the different parts. Explain how and why they erupt. Watch animations and videos of this to help support pupils understanding of the process. Also relate to real life volcano eruptions that have happened in the news in recent times (see newsround clips or bbc bitesize) this should inforce that eruptions didn't just happen in the past like Pompeii but they can happen around the world now. Discuss why people still live near volcanos and how an eruption would affect these people. **Success criteria:** • Explain how a volcano is formed/made using the correct geographical vocabulary. • Identify the different parts of a volcano. • Explain what causes a volcano to erupt • Describe the process of an eruption using the correct terminology (lava, vent, magma, force, gas, mantle, crust) • Discuss why people still live near volcanos. • Think about how an eruption would affect the people who live near them.

Sequence of Teaching and Learning

6	**LO: To use geographical sources to find out about Mount Everest.**	Provide prompts to help scaffold what you want the pupils to find out and help direct their attention to specific bits of information. Things to find out are height, climate/altitude, country, continent, type of mountain, signs of life, human impact.
7	**LO: To use geographical sources to find out about Ben Nevis.**	Provide prompts to help scaffold what you want the pupils to find out and help direct their attention to specific bits of information. Things to find out are height, climate/altitude, country, continent, type of mountain, signs of life, human impact.
8	**LO: To compare Mount Everest and Ben Nevis.**	Pupils must first be able to identify and compare that the mountains are in different continents. Then pupils go on present their findings in a clear way in a given structure to support. Pupils highlight which aspects of the mountains are the same and which are different using the correct geographical terminology.

Sequence of Teaching and Learning

9-10	**L.O. To understand and be able to describe how people in different areas might live their lives in different ways.**	Presenting information about Sherpas.