


Learning journey	Geography	Mountains, Volcanoes & Earthquakes	Year 3 Summer	
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Building on prior learning	Theme overview	Preparing for future learning	Vocabulary	
<p>Before the start of the unit the children...</p> <p>The pupils know how to use an atlas and find key countries on a map.</p> <p>The pupils can use positional and directional vocabulary while using a variety of maps.</p> <p>The pupils have identified suitable locations to build settlements</p> <p>The pupils have studied how land is used in cities through a variety of resources</p> <p>The pupils have identified the different mountains and mountain ranges of the UK.</p> <p>The pupils have compared the advantages and disadvantages of living in different locations around Europe.</p>	<p>The pupils will learn what the Earth is made of</p> <p>The pupils will study what happens when plate tectonics collide</p> <p>The pupils will compare different volcano types</p> <p>The pupils will identify how earthquakes occur</p> <p>The pupils will study how the eruption of Fuego affected people's lives</p> <p>The pupils will identify how the earthquake of Tohoku affected people's lives</p>	<p>In Year 4 the pupils will go on to study Migration where they will need to use their mountain, volcano and earthquake knowledge to help them identify reasons for leaving natural disaster zones.</p> <p>They will learn about migration and how it affects people and places</p> <p>The pupils will study how natural disasters can contribute to people migrating</p>	<p>Crust</p> <p>Mantle</p> <p>Outer core</p> <p>Inner core</p> <p>Magma</p> <p>Lava</p> <p>Pressure</p> <p>Friction</p> <p>Basalt</p> <p>Granite</p> <p>Fold mountain</p> <p>Ocean trench</p> <p>Tsunami</p>	<p>Primary effects</p> <p>Secondary effects</p> <p>Immediate responses</p> <p>Long-term responses</p> <p>Shield volcano</p> <p>Stratovolcano</p>

NC coverage and HWJS skills development

National curriculum coverage for Geography

- 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
- identify key topographical features and land-use patterns;
- understand geographical similarities and differences through the study of human and physical geography of a region in a European country, and a region within South America

Describe and understand key aspects of:

- human geography, including: types of settlement and land use
- physical geography, including: mountains, volcanoes and earthquakes
- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use fieldwork to observe, measure, record and present the physical features in the local area using a range of methods, including sketch maps

HWJS skills development

- Identify where mountains, volcanoes and earthquakes are likely to occur
- Compare different types of volcanoes
- Describe the different layers of the Earth
- Explain how tectonic plates cause mountains, volcanoes and earthquakes
- Evaluate how the eruption of two separate famous earthquake eruptions affected people

Knowledge organisers

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Structure of the Earth

Crust:	Solid rock 0-100km thick, cooled and solidified. Broken into tectonic plates.
Mantle:	Liquid metal rock, ~2800km thick.
Outer Core:	Liquid metal, iron and nickel, ~4500°C.
Inner Core:	Solid metal, iron and nickel, ~5500°C.

Keywords

Algebra	Maths topic in the maths.
Area	Measures the flat surface of a face.
Area of a Triangle	Formula for the area of a triangle: $\frac{1}{2} \times \text{base} \times \text{height}$.
Area of a Rectangle	Formula for the area of a rectangle: $\text{length} \times \text{width}$.
Area of a Square	Formula for the area of a square: $\text{side} \times \text{side}$.
Area of a Circle	Formula for the area of a circle: $\pi \times \text{radius}^2$.
Area of a Parallelogram	Formula for the area of a parallelogram: $\text{base} \times \text{height}$.
Area of a Trapezium	Formula for the area of a trapezium: $\frac{1}{2} \times (\text{top side} + \text{bottom side}) \times \text{height}$.
Area of a Composite Shape	Break the shape into simpler shapes and find their areas.
Area of a Compound Shape	Break the shape into simpler shapes and find their areas.
Area of a Complex Shape	Break the shape into simpler shapes and find their areas.

Earthquakes

Earthquakes occur when plates jolt forward after getting stuck.

Volcanoes

Volcanoes erupt when magma rises to the surface.

Shield Volcano

Shield volcanoes are a type of volcano that has a broad, shallow crater and a gentle slope. They are built up by many thin layers of lava flows and cinders.

3 main types of volcanoes

Shield volcanoes, Composite volcanoes, and Cinder cones.

Mountains

Mountains are large areas of land that rise high above the surrounding land. They are formed by the collision of tectonic plates.

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	19/NOV/2011 9.0 Richter scale	11/03/2011 9.0 Richter scale
Location	Japan	Guatemala
Primary Effects	15,000 people died 8000 people missing 8000 people injured	11,000 deaths 200 people missing 300 injured
Secondary Effects	Tsunami waves and flooding (up to 5m high) travelled 10 km inland on western side of Japan Disruption to travel and farming	Heavy rain caused landslides Hunger due to crops being destroyed Disruption to travel and farming
Immediate Responses	Military aircraft identified areas needed most urgent help Roads closed to bring emergency medical care / tents	Search & rescue teams set up to reach people Water / food / medical care / tents
Long term Responses	Continued training, education and drills Improved emergency response systems (roads, electricity, buildings)	Education and evacuation drills New and improved emergency response systems Funding infrastructure

<p><u>Connections / deepening understanding</u></p> <p>English – Pompeii diary entry, Volcano poetry</p> <p>Science - Rocks</p> <p>Art – Hokusai artist study (Mount Fuji sketches)</p>	<p><u>RADE</u></p> <p>Article 6 - (life, survival and development)</p> <p>Article 12 - (respect for the views of the child) Article 13 - (freedom of expression)</p> <p>Article 17 - (access to information from the media)</p> <p>Article 22 - (refugee children) Article 27 - (adequate standard of living) Article 28 - (right to education)</p> <p>Article 29 - (goals of education)</p>			<p><u>Assessment</u></p> <p>The pupils will be assessed through ongoing assessment using the ‘Where am I?’ starter and the retrieval practise at the start of each lesson.</p> <p>By the end of the unit most pupils will be able to explain what the Earth is made of, how earthquakes, mountains and volcanoes are formed, and how natural disasters can affect people’s lives.</p>		
<p>Assessment recording for the unit - checking the level of pitch of the work</p>						
<p><u>Key skill(s)/ knowledge to be assessed by the end of the unit</u></p>	<p><u>Lower attaining</u></p>		<p><u>Middle attaining</u></p>		<p><u>Higher attaining</u></p>	
<p>Key skills: Describe how tectonic plates cause physical changes to land</p>	<p>The pupils can use simple geographical terminology to describe how the land can cause physical changes</p>		<p>The pupils can use correct geographical terminology to describe how the land can cause physical changes for mountains or volcanoes</p>		<p>The pupils can confidently use geographical terminology to describe how the land can cause physical changes for mountains and volcanoes</p>	
<p>Key knowledge : Know how mountains, volcanoes and earthquakes form/occur</p>	<p>The pupils can identify the differences between mountains, volcanoes and earthquakes</p>		<p>The pupils can explain how mountains, volcanoes and earthquakes form/occur</p>		<p>The pupils can explain how mountains, volcanoes and earthquakes form/occur and why people live in natural disaster zones</p>	

NB: The assessments are completed for two reasons – to enable the class teacher and in turn the subject leader to evaluate the pitch of the learning within the unit in order to consider any necessary updates and for the class teacher to report to parents on the attainment of pupils in the end of year reports