

Term 4-5

Unit Overview: UKS2 Geography

Volcanoes and Earthquakes

<div><div>National Curriculum Objectives</div><div><ul style="list-style-type: none">Describe and understand key aspects of physical geography, including: volcanoes and earthquakes.Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.Demonstrate understanding of how and why some features or places are similar or different and how and why they change.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).</div><div><div>By the end of this topic: Children should know:</div><div>the names and locations of the world’s principal volcanoes and areas at risk from earthquakes; • the structure of the Earth, including what happens at plate boundaries; • the main features, causes and effects of volcanoes and earthquakes; • how people can respond to a natural disaster, such as an earthquake.</div><div>Children should be able to:</div><div>Use maps and atlases to locate places with significant volcanoes and where significant earthquakes have occurred (e.g. the Pacific ‘Ring of Fire). Use geographical vocabulary, including some technical terms, when describing the Earth’s structure and the features of volcanoes and earthquakes.</div></div></div>	<div><div>Substantive knowledge</div><div><ul style="list-style-type: none">I know that the structure of the Earth affects what happens on the surface.I know what happens at the boundaries between the Earth’s plates.I know the key features of a volcano.I know where famous earthquakes have occurred and how they have affected local people.I know what happens when a volcano erupts.I know how volcanoes and earthquakes are linked.</div><div><div>Support</div><div>Children will be able to identify different natural features on maps such as a mountain and river and describe them using a range of key vocabulary.</div><div>Children will describe some key physical processes and the resulting landscape features.</div></div><div><div>Extend</div><div>Children will independently label the features of a volcano and describe how, and offer reasons why, it erupts, and relate this to one or more examples of volcanoes around the world.</div><div>Children will relate the short and long term effects of earth processes to the migration of people over time.</div></div><div><div>Disciplinary knowledge</div><div><ul style="list-style-type: none">Identify the effects of earthquakes on land and people.Describe and explain what kind of help people need after an earthquake.Explore why people choose to live in regions at risk.</div></div></div>	<div><div>Vocabulary</div><table><tr><td><div><div>Locational terms</div><div>epicentre plate boundary</div></div></td><td><div><div>Geographical terms</div><div>crater disaster dormant eruption magma tsunami</div></div></td><td><div><div>Place names</div><div>Great African Rift Valley Haiti Iceland Japan Mauna Loa Pacific Ring of Fire San Andreas Fault</div></div></td></tr></table><div><div>Phonics focus</div><div>volcano / volcanoes boundary</div></div><table><tr><td><div><div>Key People</div><div>Dr Susan Loughlin BGS - Physical volcanologists study the processes and deposits of volcanic eruptions.</div><div>Geophysicists study seismology (the study of earthquakes - very useful in volcano monitoring), gravity, magnetics, and other geophysical measurements.</div><div>UCL Dr Emma Nicholson: Associate Professor in Earth Sciences</div></div></td><td><div><div>Extended writing opportunity</div><div>Newspaper report about the eruption of a volcano.</div></div></td></tr></table><div><div>Fieldwork</div><div><ul style="list-style-type: none">Use the school and its grounds as a site for studying aspects of physical and human geography by investigating questions such as ‘How can we make our school grounds more bee friendly?’Explore biodiversity in the local area.Use standard field sampling techniques appropriately.</div></div></div>		<div><div>Locational terms</div><div>epicentre plate boundary</div></div>	<div><div>Geographical terms</div><div>crater disaster dormant eruption magma tsunami</div></div>	<div><div>Place names</div><div>Great African Rift Valley Haiti Iceland Japan Mauna Loa Pacific Ring of Fire San Andreas Fault</div></div>	<div><div>Key People</div><div>Dr Susan Loughlin BGS - Physical volcanologists study the processes and deposits of volcanic eruptions.</div><div>Geophysicists study seismology (the study of earthquakes - very useful in volcano monitoring), gravity, magnetics, and other geophysical measurements.</div><div>UCL Dr Emma Nicholson: Associate Professor in Earth Sciences</div></div>	<div><div>Extended writing opportunity</div><div>Newspaper report about the eruption of a volcano.</div></div>
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<div><div>“Thinking like a Geographer”</div><div><div>❖</div><div>Oddizzi Weekly news pack and Big Question</div></div></div>								

DOWN AMPNEY PRIMARY SCHOOL

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		<ul style="list-style-type: none"> Record selected geographical data on a map or large-scale plan, using colour or symbols and a key.
<u>Map skills (Digital and OS Maps)</u> <ul style="list-style-type: none"> ❖ Use latitude and longitude on a globe and atlas. ❖ Create sketch maps using symbols and a key. ❖ Relate different maps to each other and to aerial photos. ❖ Use models and maps to discuss land shape ie contours and slopes. ❖ Choose the most appropriate map for a purpose. 		<u>Deeper thinking.</u> <ul style="list-style-type: none"> ❖ What if volcanoes erupted more frequently. ❖ What if there weren't any volcanoes.
<u>British Values</u> <ul style="list-style-type: none"> ❖ Democracy: Pupils look at different perspectives and respect the views of others. They think about local, national and global issues. ❖ Rule of Law: Children think about moral law and the consequences of their actions on future generations. ❖ Individual Liberty: Individual liberty is taught and encouraged by teaching children about the environment and how they can make a difference in protecting our world. ❖ Mutual Respect for and tolerance of those with different faiths and beliefs: Pupils compare similarities and differences between their lives and those of others within the UK. We aim to disband stereotypes and foster a common respect for different cultures within our own country by learning about them. 		
<u>Christian Values</u> <ul style="list-style-type: none"> ❖ Belonging: Appreciate the diversity of cultures across continents. ❖ Empowering: Compassion and justice for all citizens of the world we live in. ❖ Succeeding: Make responsible choices to look after our environment and leave the planet a better place for future generations. 		
<u>Case studies / examples</u> <ul style="list-style-type: none"> ❖ Mount Everest ❖ Himalayas 	<u>Reading opportunities</u> <ul style="list-style-type: none"> ❖ Volcanoes around the world fact-files 	<u>Reading support</u> <ul style="list-style-type: none"> ❖ Word ban game Pictorial based weekly challenges ❖ Vocabulary mats ❖ Videos and photographic examples ❖ Writing frames ❖ Teaching of key vocabulary
<u>Prior learning</u> <p>KS1: Coasts- Know some similarities and differences between the natural world around them and contrasting environments.</p> <p>LKS2: Rivers: Recognise and explain how human activity affects rivers & recognise and explain how flooding affects communities.</p>	<u>Key questions</u> <ul style="list-style-type: none"> ❖ What if the Earth's core was as cool as the surface? ❖ Where in the world do the plates meet? ❖ What happens when two plates push together / pull apart? ❖ Do all volcanoes erupt? ❖ What immediate and longer-term impacts can earthquakes have on people and communities? 	<u>Future learning</u> <p>UKS2 Europe: Consider the environmental impact of tourism, both positive and negative.</p> <p>KS3 Understand the interaction between physical and human processes, and of the formation and use of landscapes and environments. Interpret Ordnance Survey maps in the classroom and the field, including using grid references and scale, topographical and other thematic mapping, and aerial and satellite photographs.</p>