Class 3

Cycle 1 Autumn

Journey Around the World (Physical Geography)

Half Term 1: A Study of Volcanoes

Half Term 2: Mountains of the World and the Peak District

Curriculum Intent:

To foster children who are aware of the world and their position within it by knowing how lucky they are and how others are far less fortunate. To actively be able to look out for, support and show kindness and empathy towards others, so they become citizens of the world whose aim is the betterment of society. To know and to be proud of where they are from and to fluently use a wide range of appropriate vocabulary when discussing and writing across our wide curriculum.

During this curriculum focus, children will appreciate how fortunate they are to live incredibly close to the Derbyshire Peak District and consider what this protected area offers. They will focus on local mountains in the Peak District before moving on to world mountains. Children will explore conditions which local people live in around key mountains (Everest – Nepal). A local artist will provide aspirations for children's future careers. Linking to previous work on human geography (Are We Looking After Our World?) children will explore the effect of powerful physical geographical events such as earthquakes and its impact on communities.

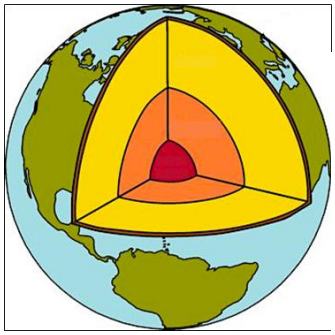
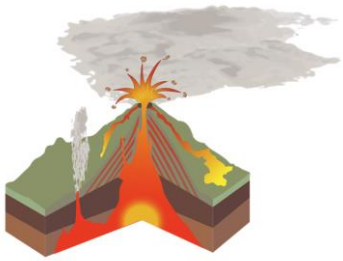
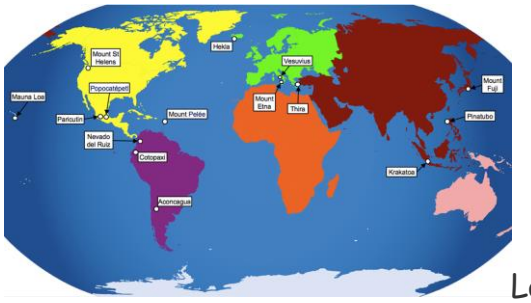
Morley Journey	
Whole School	
Class 1	Children will have learnt about extreme regions of the Earth during a polar and equator region curriculum focus. Within the Julia Donaldson focus, children have explored key environments: desert, mountains and oceans.
Class 2	During the rivers topic, the children learnt how plants, animals and humans rely on rivers for life. They will recognise the importance of water for life and realise how lucky we are to have access to clean water unlike other people around the world. They learnt about how our climate is changing and the positive and negative impacts they can have on climate. They are able to make decisions about their own way of life to positively impact on climate change.
Class 3	Previously children explored a global focus of Human Geography – Are We Looking After Our World? This topic considered human's impact on the world: plastic pollution, climate change, deforestation, poaching, refugees, food and water waste and sustainability.

Subjects	Areas Covered
English/Books	Wonder by RJ Pallacio - Focus on empathy and kindness The Brockenspectre – Linda Newberry - mountains
Science	Year 5 Earth in Space Light – Links to work on mountains and the Brockenspectre
History	Local history – Peak District – mill stones. Developed by residential trip. Edmund Hillary as a significant explorer who first climbed Everest
Geography	Physical Geography Focus: Detailed study of Volcanoes: Understanding and Investigating the Earth's Structure, Locating volcanoes, Earth's crust, Impact of Volcanoes, Effect of volcanoes and why people choose to live near a volcano. Mountains – location, types, climate, how mountains are formed, animals, impact of humans, famous mountains and mountain ranges and explorers. Geography skills – Using OS maps effectively, understanding symbols and identify Derbyshire peaks – compare to mountains around the world. Peak District local focus.
Art	Nicholas Roerich – mountains - the use of colour for affect. Albert Bierstadt – American mountainous landscapes – Luminism Art movement to explore the effect of light.
D&T	Nepal – Squashed Tomato Project select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Design and implement practical and effective pulley systems.
Music	Charanga Music
Computing	Hopscotch Book Creator – Create Mountains ebook to present work including a full range of multi-modal features.
RE	Why do some people think God Exists (Christians, nonreligious (Humanists) What matters most to Christians and Humanists? Religions and Christianity Around the World Interpretating the Christmas Story
PHSE	Relationships and Bullying Matters + Online Safety
Enrichment	Visiting Derby artist – Brockenspectre specialist Hathersage residential – physical geography focus Derby volcanologist from Derby University

Key Knowledge: Journey Around the World - Half Term 1 - A Study of Volcanoes

Half Term 2 - Mountains of the World

What I should know at the start of the topic	• I know about extreme regions of our world - polar regions. I know about varied landscapes in our world and what the basic conditions are like: desert, mountains, polar, forests. • I know how Derby is different to various places around the world, especially when comparing my home. • I know that Pompeii was a significant earthquake in Roman times. • I know people have had to evacuate their homes due to a natural event, war or persecution. These people leave immediately and can become refugees.
Significant People	• Edmund Hillary - first climber to reach the summit of Mt Everest *because it was there.* •  • A study into various associated professions: ○ Derby Volcanologist ○ Volcanologists - **David Alexander Johnston** (December 18, 1949 – May 18, 1980) was an American United States Geological Survey (USGS) volcanologist who was killed by the 1980 eruption of Mount St. Helens in the U.S. state of Washington. ○  •
Derby	• Peak Distract mountains - Mam Tor (517m), Win Hill, Lose Hill, Bleaklow (633m), Higger Tor (434m), Grassmor (852m). Provide children with a contrast in height and conditions to mountains around the world.

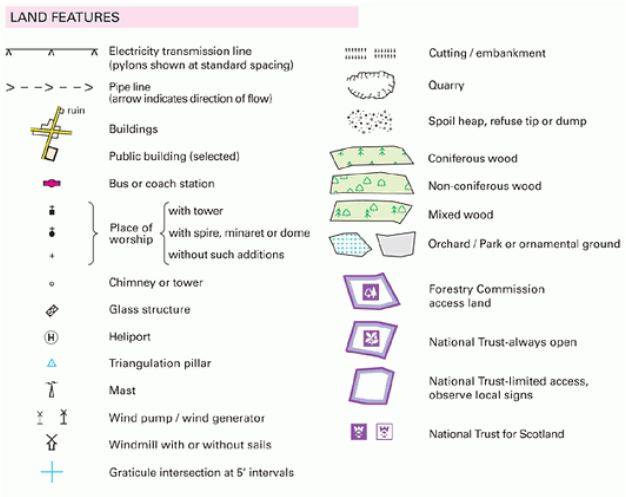
	• USAF Boeing RB-29A Superfortress at Higher Shelf Stones - crashed in 1948 Glossop Derbyshire (near where LS Lowry lived in later life) • Derby Katy Chamberlain - volcanologist from Derby University to work with the children.
Key Information	  Label and explain Earth's Structure and structure of a volcano (in detail) - Crust, Mantle, Outer core and Inner core.  Label and locate volcanoes around the world. <u>How Volcanoes are formed</u> • Magma rises through cracks or weaknesses in the Earth's crust. • Pressure builds up inside the Earth. • When this pressure is released e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption. • The lava from the eruption cools to form new crust. • Over time, after several eruptions, the rock builds up and a volcano forms. There are five types of mountains: 1. Fold - The Himalayas are fold mountains. 2. Block - The Sierra Nevada mountains in California, USA are fault-block mountains.

3. Dome - Bear Butte in South Dakota, USA is an example of a dome mountain.
4. Volcanic – Mount Fuji in Japan is a volcanic mountain.
5. Plateau - The Columbia Plateau in the Northwest USA is an example of this type of mountain.

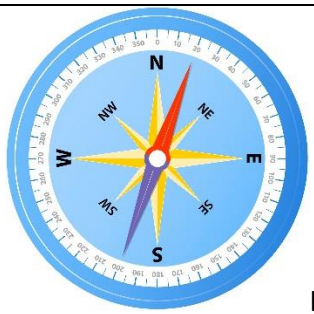
Famous mountain ranges around the world are:

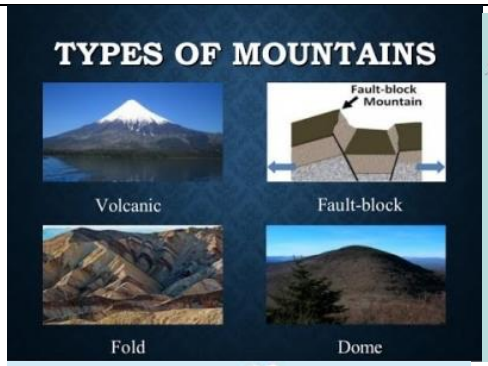
- The Himalayas, Asia
- The Rocky Mountains, North America
- The Andes, South America
- The Ural Mountains, Europe
- The Alps, Europe
- The Pyrenees, Europe

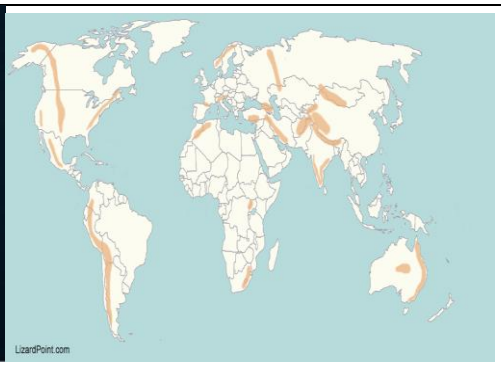
Understand key OS map keys:



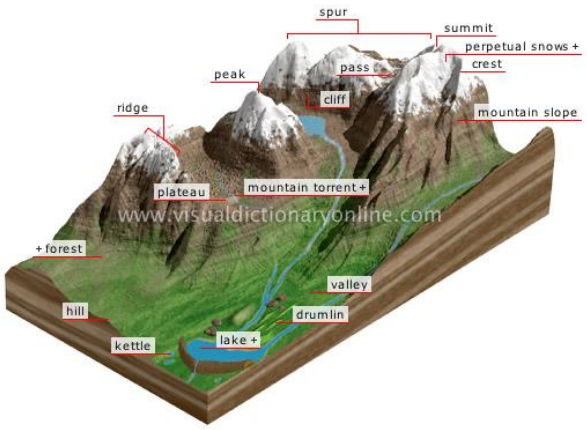
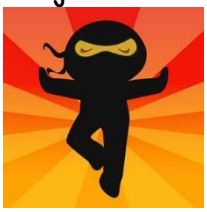


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Locate with 8 point compass directions</td></tr>
<tr><td>Diagrams/Maps</td><td colspan="2">






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<tr><td rowspan="4">Vocabulary Ninja
</td><td>Altitude</td><td>a measurement of distance, going up</td></tr>
<tr><td>Ascent</td><td>a climb or walk to the summit of a mountain or hill</td></tr>
<tr><td>Avalanche</td><td>a large mass of snow or ice detached from the mountain slope and heading down the mountain</td></tr>
<tr><td>Erosion</td><td>when wind or water sweeps away rock or soil from one place on the Earth's surface to another</td></tr>
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	Gorge	*a narrow valley, usually with a stream or river running through it*
	Mountain Range	*a group of mountains that form a chain or cluster*
	Slope	*the slanted side of a mountain*
	Summit	*the highest point on a mount*
	Tectonic Plates	*large pieces of rock that make up the Earth's surface*
	Valley	*low ground in between mountains*
	crest	*The top or highest part of something is also a crest, like the crest of a hill or the crest of a wave. As a verb, crest means "to reach the top" like when you crest a mountain.*
	Dormant	*A volcano which has not erupted for a long time but is expected to again.*
	Plateau	*A plateau is a flat, elevated landform that rises sharply above the surrounding area on at least one side.*
	Brockenspectre	*A Brocken spectre (German: Brockengespenst), also called Brocken bow or mountain spectre, is the magnified (and apparently enormous) shadow of an observer cast upon clouds opposite the Sun's direction.*

Vocabulary Ninja 	Tectonic Plates	*tectonic plates are pieces of Earth's crust and uppermost mantle. All of Earth's land and water sit on these plates. The plates are made of solid rock*
	Crater	*a bowl-shape, or hollowed-out area, produced by the impact of a meteorite, volcanic activity, or an explosion*

	Evacuation	*An immediate escape from an area that contains an immediate threat*
	Disruption	*disturbance or problems which interrupt an event, activity, or process.*
	Extinct	*of a volcano - not having erupted for 10,000 years and not expected to erupt again*
	Dormant	*A dormant volcano is an active volcano that is not erupting, but supposed to erupt again.*
	Active Volcano	*n active volcano is a volcano that has had at least one eruption during the past 10,000 years.*
	seismic waves	*a wave in the earth produced by an earthquake*
	epicentre	*the point on the earth's surface vertically above the focus of an earthquake.*
	Ash	*Volcanic ash is a mixture of rock, mineral, and glass particles expelled from a volcano during a volcanic eruption*
	Lava	*Molten rock which has been expelled from a volcano*
	Magma	*Magma is extremely hot liquid and semi-liquid rock located under Earth's surface.*
	Mantle	*The Earth's mantle is a layer of silicate rock between the crust and the outer core.*
	Outer Core	*The outer core is the third layer of the Earth. It is the only liquid layer, and is mainly made up of the metals iron and nickel, as well as small amounts of other substances. The outer core is responsible for Earth's magnetic field. As Earth spins on its axis, the iron inside the liquid outer core moves around.*

	Inner Core	*The inner core is a hot, dense ball of (mostly) iron. It has a radius of about 1,220 kilometers (758 miles). Temperature in the inner core is about 5,200° Celsius*
	Crust	*Outer layer of the earth*