



Topic:	Volcanoes
Main Subject	Geography
Linked Subjects	DT (Structures)
NC objective	Describe and understand key aspects of volcanoes.
Main subject key knowledge and skills	<p>Geography</p> <ul style="list-style-type: none"> • Explain why aspects of countries are similar and different in physical and human geographical features (Iceland - Volcanoes) • Demonstrate an understanding of the key physical processes that occur around the world • Understand some of the physical processes in the formation of rivers and volcanoes • Explain the landscape of Iceland in terms of how it has been shaped by volcanoes • Use atlas symbols • Use scale bar on maps to measure distances • use mapping software with a 3D view to compare plan and oblique views of places • Use medium scale maps (eg. OS: 1:10,000, 1:25,000 and 1:50,000 maps) • Understand there are differences between physical and human aspects of regions - East Anglia (UK), Catalonia (Europe), California (North America) and Amazon Basin
Linked subject key knowledge and skills	<p>DT</p> <p>I can use prototypes, and computer-aided designs to represent designs.</p> <p>I can create innovative designs that improve upon existing products.</p> <p>I can make products through stages of prototypes, making continual refinements.</p> <p>I can ensure products have a high quality finish, using art skills where appropriate.</p> <p>I can evaluate the design of products so as to suggest improvements to the user experience.</p> <p>I can combine elements of design from a range of inspirational designers throughout history, giving reasons for choices.</p>
Discrete Subjects	<p>Science - Evolution and Inheritance</p> <p>P.E. - Dance, swimming and volleyball</p> <p>French - At the weekend</p> <p>PSHE - Living in the Wider World</p>

Main Text	<p>Newspaper Reports</p> <p>Non-fiction fact files</p> <ul style="list-style-type: none"> - Mount Saint Helens - Mount Etna - Mount Popocatepetl 	Examples of instructions	<p>Escape from Pompeii</p> 
Main Writing Genre	Newspaper Report	Instructions	Short Story
Enrichment	<p>Now Press Play - Natural Disasters</p> <p>VR Experience</p>		
Weekly overview	<p>WK1 - HOOK</p> <p>Geography</p> <p>Physical Geography: Describe what happens at the plate boundaries and what happens when the plate collides. What happens when a volcano erupts? Go through different tectonic plates and label some volcanoes on these plates.</p> <p>Locate some of the world's volcanoes on a map and research when they last erupted.</p> <p>English</p> <p>WK1</p> <ul style="list-style-type: none"> • Study newspaper reports and learn about different elements of journalism and how we write them. • Planning a newspaper report. Research the incident and gather facts and eyewitness accounts. <p>Maths- Ratio 5 lessons</p> <p>L1 - Use ratio language</p> <p>L2 - Introduction to the ratio system</p> <p>L3 - Ratio and fractions</p> <p>L4 - Scale drawing</p> <p>L5 - Use scale factors</p> <p>Reading</p> <p>Reading different newspaper reports.</p> <p>PE- Leadership- to perform with control and poise.</p>		
	<p>WK2 -</p> <p>Geography</p> <p>Human Geography- report the effects of a volcanic eruption.</p> <p>Look at the advantages and disadvantages of why people live near volcanoes.</p> <p>Compare and contrast using appropriate geographical vocabulary, the physical and human geography of Hiemaey (Iceland) with the area in which I live.</p>		

Compare and contrast how Hiemaey (Iceland) has changed over time.

English

- Write and edit our newspaper reports using different sentence types and tenses.
- Write an independent newspaper report on the recent Mauna Loa volcanic eruption.
- Publish edited Newspaper report.

Reading

Volcano fact files- compare and contrast different volcanoes.

Maths- Ratio 3 lessons

L6 - Similar shapes

L7 - Ratio and proportion problems

L8 - Recipes

Maths Algebra 2 lessons

L1 - 1 and 2 step function machines

L2 - Form expressions

D&T

- single lesson: use TinkerCAD to create a computer-aided design of a model volcano.

PE - To demonstrate leadership skills and to organise teams efficiently and set up tasks for maximum involvement.

WK3 -

Science - Recognise that living things produce offspring of the same kind but normally offspring vary and are not identical to their parents. Using scientific language and ideas to explain, evaluate and communicate my methods and findings.

English - Using the Escape from Pompeii story (Reading text), study the features of a short narrative story that includes a time-travelling element. Class rewrite of the story.

- Story board the Escape from Pompeii text.
- Study Story openings: Setting description; Character description; Action; Dialogue.
- Analyse and practice use of: descriptive language; a variety of clause types; shifts in tense; shifts in formality (PP - compound sentences using BOYS)

Reading

Read Escape from Pompeii

Maths- Algebra 8 lessons

L3 - Substitution

L4 - Formulae

L5 - Form equations

L6 - Solve one-step and two-step equations

L7 - Find pairs of values

D&T

- Research structures: add to computer aided design to create model brief.
- Cut & shape materials and join components with precision to create volcano structure, using appropriate techniques
- Complete structure using art media
- Evaluate completed structure.

PE- to use different ways to communicate effectively, to manage behaviour and to enjoy competing and challenging yourself to improve.

WK4 -

Science - Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. Finding things out using a wide range of secondary sources of information. Recording complex data and results using scientific diagrams and labels, classification keys, scatter graphs, bar and line graphs. Reporting and presenting findings from enquiries, including conclusions, casual relationships and explanations of and degree of trust in results in oral and written forms such as display and other presentations.

English - Story board and write own disaster short narrative.

- Plan; write; edit & improve; Publish

Reading

Looking at examples of different instructions- structural and language features.

Maths- Algebra 1 lessons

L8 - Solve problems with two unknowns

Maths Decimals 9 lessons

L1 - Place value within 1

L2 - Place value - integers and decimals

L3 - Round decimals

L4 - Add and subtract decimals

PE- to perform with control and poise.

WK5 -

Science - Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Finding things out using a wide range of secondary sources of information.

English -

- Retrieval lesson on language/structural features of instruction texts.
- Planning/writing of independent instruction text: How to build a model volcano.

	<ul style="list-style-type: none"> • Publish completed/edited instruction text. <p>Reading</p> <p>For the remainder of this half-term we are looking weekly at individual pieces of writing to do with volcanoes, we are correcting our SATS past papers and we are practicing our comprehension and question answering skills.</p> <p>Maths - Decimals 5 lessons</p> <p>L5 - Multiply by 10,100 and 1000</p> <p>L6 - Divide by 10,100 and 1000</p> <p>L7 - Multiply decimals by integers</p> <p>L8 - Divide decimals by integers</p> <p>L9 - Multiply and divide decimals in context</p> <p>Design and Technology</p> <p>Structures - This STEM unit will focus on the building of structures with different materials. We will explore different structures around the world and learn about what different structures are used for and why we might use different materials in building.</p> <p>PE- to understand how to plan an activity safely and demonstrate leadership skills.</p>
	<p><u>WK6</u> - Assessment week.</p> <p>Science - Kahoot Quiz</p> <p>English - completion of 'instruction' unit</p> <p>Reading</p> <p>For the remainder of this half-term we are looking weekly at individual pieces of writing to do with volcanoes, we are correcting our SATS past papers and we are practicing our comprehension and question answering skills.</p> <p>Maths - Fractions, decimals and percentages 5 lessons</p> <p>L1 - Decimal and fraction equivalents</p> <p>L2 - Fractions as division</p> <p>L3 - Understand percentages</p> <p>L4 - Fractions to percentages</p> <p>L5 - Equivalent fractions, decimals and percentages.</p> <p>PSHE - Living in the wider world</p> <p>In this unit we will look at belonging to a community, media literacy and digital resilience and money and work.</p> <p>PE- Planning and delivering activities for younger children.</p>
Reflection of Learning	<p>Final write up of news paper reports.</p> <p>Regular quizzes on our science learning</p>

	Daily end of lesson review of favourite and most important facts of volcanoes to use to compile end of unit booklet on our learning.
Sticky Knowledge	<p>Volcanoes are caused when magma rises to the surface of the Earth, which causes bubbles of gas to appear in it. This gas can cause pressure to build up beneath the surface, and it eventually explodes.</p> <p>Earthquakes are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the seismic waves that make the ground shake.</p> <p>A tsunami is a series of large waves generated by an abrupt movement on the ocean floor that can result from an earthquake, an underwater landslide, a volcanic eruption or - very rarely - a large meteorite strike.</p> <p>Mountains make up one-fifth of the world's landscape.</p> <p>Mount Everest is the world highest mountain and it is 8,850m high.</p> <p>There are mountains under the surface of the sea.</p> <p>80% of our fresh water originates from mountains.</p> <p>The highest 14 mountains in the world are all found in the Himalayas.</p>
British values/citizenship	
Computing Links	<ul style="list-style-type: none"> * Now Press Play * Map work for physical geography <p>Research skills for finding out important information</p>
Outdoor learning	
Home learning	Brainbuilder homework
Memory retention	<p>Kahoot quizzes</p> <p>Retrieval lessons</p>