



Birchfield
PRIMARY SCHOOL

Year 3 Curriculum Overview

Term 2.1

Teaching Team:

Year Group Leader: Miss Rose

Class Teachers: Miss Coughlan and Miss Karim

Teaching Assistant: Miss Brown

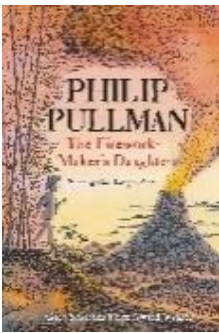
SLT: Miss Saboor

PE: PE lessons are on **Wednesday**.

On these days, children must be wearing their P.E kits. This includes a white t-shirt, black bottoms and trainers. No jewellery is to be worn on PE days; parents must remove this before bringing their child to school on these days.

Homework: Workbooks and reading books are sent home on Friday to be **returned by Tuesday**.

Please see below an overview of the main themes, knowledge, and skills we will be covering this half term.

<p>Enquiry Question</p>	<p>How do earthquakes and volcanoes impact our world?</p>
<p>Significant people</p>	<p><u>Mary Anning (1799–1847)</u> was an English fossil collector, dealer, and self-taught palaeontologist who made significant contributions to the understanding of prehistoric life during the early 19th century. Mary Anning is best known for her discoveries of marine reptile fossils, including the first complete Ichthyosaur skeleton in 1811 and the first British Plesiosaur in 1823. Despite facing challenges as a woman in a male-dominated scientific community, her work laid the foundation for advancements in palaeontology and contributed to our understanding of extinct species and the history of life on Earth.</p>
<p>Class Texts</p>	<p>The Firework Makers Daughter by Phillip Pullman</p> 
<p>Reading</p>	<p>We will be covering the following reading domains:</p> <p>2b – Retrieve and record information / identify key details from fiction and non-fiction.</p> <p>2d – Make inferences from the text / explain and justify inferences with evidence from the text.</p> <p>2e – Predict what might happen from details stated and implied.</p> <p>The children will develop these skills using the class text, the Firework Makers Daughter. This will be completed through a variety of different style questions.</p>

<p>Writing</p>	<p>In writing, we will be looking at poetry, persuasive adverts and explanation texts, using our class text 'The Firework Makers Daughter.'</p> <p>The children will use a range of organisational skills and language features including, writing in paragraphs, formal language, chronological order, emotive language, personification and metaphors.</p>
<p>Maths</p>	<p>In Maths we will be looking at money. We will be looking at converting pounds and pence; and adding and subtracting amounts.</p> <p>We will then move onto looking at statistics, reading pictograms, bar charts and tables.</p> <p>We will also be looking at length and perimeter. We will be looking at measuring lengths in metres (m), centimetres (cm) and millimetres (mm). We will measure, compare, add and subtract lengths. As well using our knowledge to find out the perimeter of simple shapes.</p>
<p>Science</p>	<p>In Science, we will be looking at the topics forces and magnets, and plants. The children will learn what a force is, frictional forces and force meters. In the topic of plants, the children will learn and identify the functions of each part of a plant, including, stem, root and leaves.</p>
<p>Geography</p>	<p>In Geography, children will learn about plate tectonics, the ring of fire, features of volcanoes and longitude and latitude lines.</p>
<p>Art</p>	<p>The children will be completing a project called 'Ammonite'. This project teaches and supports the children in developing their artistic techniques used in sketching, printmaking and sculpting.</p>
<p>Music</p>	<p>This half term, children will be exploring the song 'Three Little Birds by Bob Marley' and the Reggae music genre.</p> <p>The Children will identify the musical instruments, styling, artists, and songs within the Reggae genre. They will look at finding the pulse of a song and learning the lyrics in order to perform the song. The children will also be given</p>

	<p>the opportunity to further develop their recorder skills by playing along to the song.</p> <p>They will be introduced to you and using musical vocabulary such as pulse, rhythm, pitch, tempo, and dynamics.</p>
Computing	<p>The children's computing lessons will look at the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano.</p>
PSHE	<p>In PSHE, children will be focus on the key question 'What are families like?' They will learn about different family structures, similarities and differences in families from a variety of cultures and religions and how people within families care for each other.</p>
RE	<p>In RE, our focus is 'Being fair and just' and 'Being accountable and living with integrity.' This will be explored by looking at the religious practices of a variety of religions.</p>
PE	<p>The children will cover dance and dodgeball throughout this half term.</p> <p>In dance, pupils will create dances in relation to an idea. They will work individually, with a partner and in small groups, sharing their ideas. They will also develop their use of counting and rhythm. The children will learn to use canon, unison, formation and levels in their dances; and will be given the opportunity to perform to others and provide feedback using key terminology.</p> <p>In dodgeball, pupils will improve on key skills used in dodgeball such as throwing, dodging and catching. They will learn how to apply simple tactics to outwit their opponents. Children will be given opportunities to play games independently and will be taught the importance of being honest whilst playing to the rules.</p>

Knowledge Organiser: Class Text

Book Knowledge Organiser - Firework Maker's Daughter by Philip Pullman

Important Information

Plot

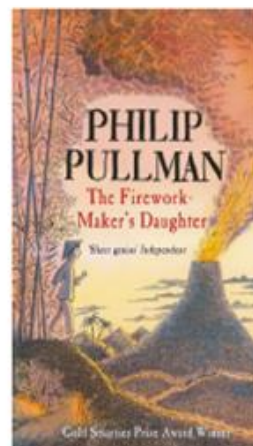
The book tells the story of Lila disagreeing with her father and making the journey to get Royal Sulphur from Razvani the Fire Fiend at Mount Merapi, as all aspirant firework-makers must do.

Themes

Talent, courage, **resilience**, good fortune, **determination** and **ambition**

Setting

The Firework Makers Daughter is set in Indonesia.



Key Questions/Reflection Points

- How does Lila feel before she embarks on her mission?
- Does Lila believe she could be a firework maker like her father?
- What might have happened if Lila had given up?
- Select descriptive language you like within the story.
- Describe Lila's personality. Explain your reasoning.
- Describe the emotions Lalchand feels throughout the story - Emotion graph.

Characters

Lila	The daughter of Lalchand and the main character. She has big dreams of becoming a firework maker.
Lalchand	Lila's father, the firework maker. He believes this is an unsuitable job for girls.
Hamlet	A talking white elephant.
Chulak	The white elephant's carer and Lila's best friend.
Razvani	A fire-fiend who lives in the heart of a volcano.
Rambashi	Leader of pirates, Chulak's uncle and lead singer of <i>Rambashi's Melody Boys</i> .
The King	The ruler and owner of the white elephant.
Dr Puffenflach	A German firework maker.
Signor Scorcini	An Italian firework maker.
Colonel Sam Sparkington	An American firework maker.

Name of Book:

Firework Makers Daughter

First Published: 1995

Author: Philip Pullman

Genre: Children's Literature/ Fantasy

Link to Enquiry

The plot of the book leads Lila to Razvani, a great fire fiend who resides in Mt. Merapi (a fictional volcano) in Indonesia

Key Vocabulary

scrupulous	Something that is done very carefully and with attention to detail.
pyrotechnics	A firework display.
scarcely	Almost never.
swathed	Wrapped in several layers of fabric.
gesticulating	To use dramatic hand gestures.
palanquin	A covered carriage usually carried by four or six servants.
disconsolately	Feeling very unhappy and unable to be cheered up.
sonorous	A deep and loud sound.
Stetson	A cowboy hat.
solemn	Not cheerful or smiling. Very serious.
sarong	A long piece of cloth wrapped around the waist.
procession	A group of people moving in an orderly fashion, especially as part of a ceremony.

Knowledge Organiser: Maths – Money

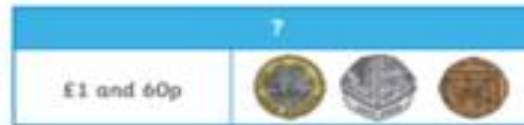


Money

Key Vocabulary

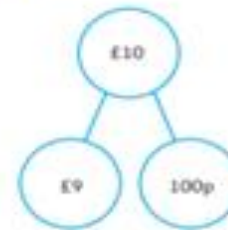
amount
change
coin
combinations
convert
note
pence
penny
pounds
value

Adding Amounts



$£1 \text{ and } 60\text{p} + £1 \text{ and } 52\text{p}$
There is $£2 \text{ and } 112\text{p}$.
 112p is $£1 \text{ and } 12\text{p}$
Altogether there is $£3 \text{ and } 12\text{p}$.

Subtracting Amounts



$£9 - £5 = £4$
 $100\text{p} - 67\text{p} = 33\text{p}$
 $£4 \text{ and } 33\text{p}$ change

UK Notes and Coins



Subtracting Amounts

$£2 \text{ and } 35\text{p} - £1 \text{ and } 80\text{p}$

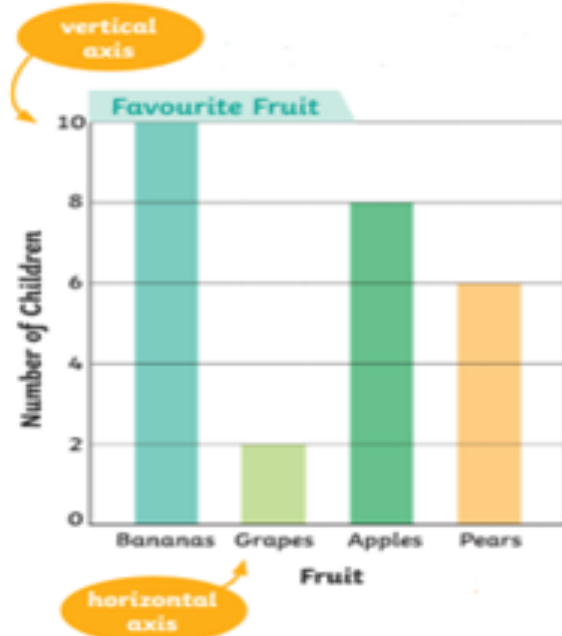


Knowledge Organiser: Maths – Statistics

Statistics

Bar Charts

Bars are used to show the data in each category. There must be a gap between each



Tables

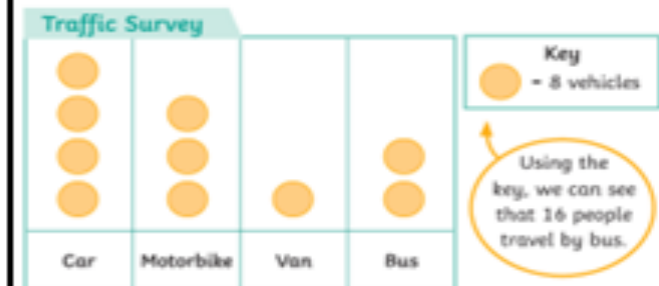
In order to understand the data presented in a table, you must read the table's title and the headings.



Ticket Type	Weekday Price	Weekend Price
Adult	£6	£7.50
Child	£4	£4.50
Student	£5.50	£6

Pictograms

Pictograms use pictures or symbols to represent data. The key shows what each symbol represents.



Key Vocabulary

data
axes

pictogram
scale

symbol
intervals

bar chart
table

horizontal axis
interpret

vertical axis

Knowledge Organiser: Maths – Length and Perimeter

Length & Perimeter

Key Vocabulary

metre (m)
centimetre (cm)
millimetre (mm)
height
length
width
perimeter
further/furthest
higher/highest
longer/longest
shorter/shortest

Perimeter

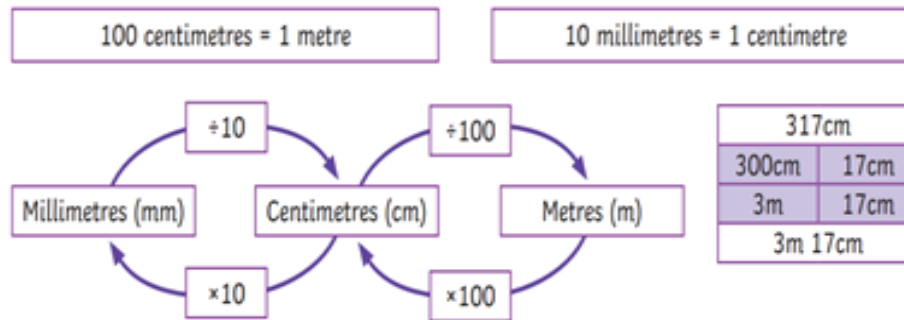
..... = perimeter

5cm
2cm 2cm
5cm
 $5\text{cm} + 2\text{cm} + 5\text{cm} + 2\text{cm} = 14\text{cm}$

3cm
 $3\text{cm} + 3\text{cm} + 3\text{cm} + 3\text{cm} + 3\text{cm} = 15\text{cm}$

perimeter = 20cm
 $6\text{cm} + 6\text{cm} = 12\text{cm}$
 $20\text{cm} - 12\text{cm} = 8\text{cm}$
 $8\text{cm} + 2\text{cm} = 4\text{cm}$

Perimeter



Add and Subtract Lengths

$14\text{cm} + 19\text{cm} = 33\text{cm}$
 $8\text{cm } 2\text{mm} + 16\text{mm} = 98\text{mm}$ or $9\text{cm } 8\text{mm}$

?	
8cm 2mm	16mm
82mm	16mm

$6\text{m} - 2\text{m } 28\text{cm}$
 $6\text{m} - 2\text{m} = 4\text{m}$
 $4\text{m} - 28\text{cm} = 3\text{m } 72\text{cm}$

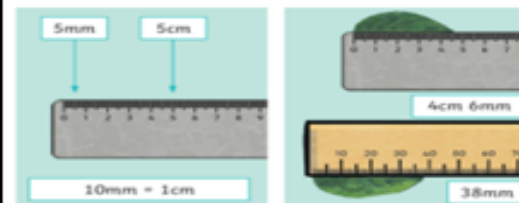
6m	
2m 28cm	?

Comparing Lengths

$6\text{mm} < 6\text{cm}$
 $6\text{cm} = 60\text{mm}$
6mm is shorter than 6cm

$320\text{cm} > 2\text{m } 6\text{cm}$
 $320\text{cm} > 200\text{cm} + 60\text{cm}$
320cm is longer than 2m 60cm

Measure Lengths



Knowledge Organiser: Science – Forces and Magnets

How strong is the force?

Forces and magnets

Key Vocabulary

Force - the things that allow the movement of all objects around us.

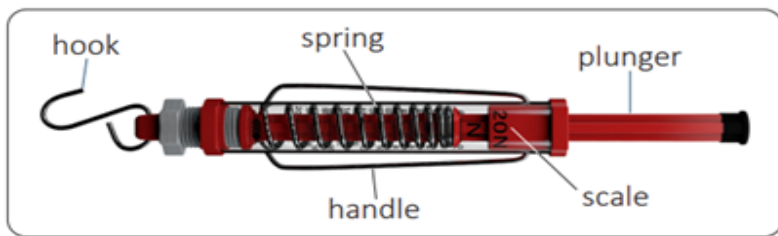
Force meter - is a device that can measure the force of an object.

Attraction - When one object moves towards another object.

Magnetic - a metal object or material that are able to attract objects or materials containing iron or steel

Force Meters

A force meter is a piece of scientific equipment that measures force. It can also be called a newton meter or a spring balance. Forces are measured in newtons (N). A force meter has a handle, hook, plunger, spring and scale.



What is a force?

A force is simply a push or a pull that makes something move. Forces act in pairs that oppose each other. Forces cause objects to move, change their speed or change their shape.



Contact Forces

Contact forces happen when two objects or bodies physically touch each other. Frictional forces are a type of contact force.



Frictional Forces

Friction is a force between two surfaces as they move across each other. Friction acts in the opposite direction to the movement. Friction always slows down a moving object. It also produces heat.



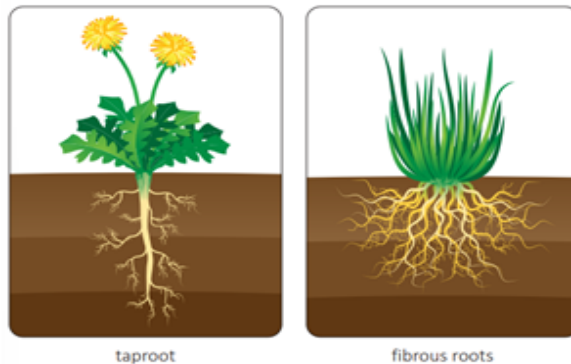
Knowledge Organiser: Science – Plants

Roots

Roots have two main functions. They anchor the plant securely in the ground and take in water and nutrients from the growing medium, such as soil. There are two main types of root systems: taproots and fibrous roots.

A taproot system has a large primary root that grows deep into the soil to anchor the plant. Some taproots are edible, such as carrots and beetroots.

A fibrous root system has many thin roots that grow out from the stem and anchor the plant just under the soil's surface. Fibrous roots spread far from the plant to reach water and nutrients.



Glossary

Pollinator - An animal that transfers pollen for the process of pollination

Vessel - A tube that transports liquids.

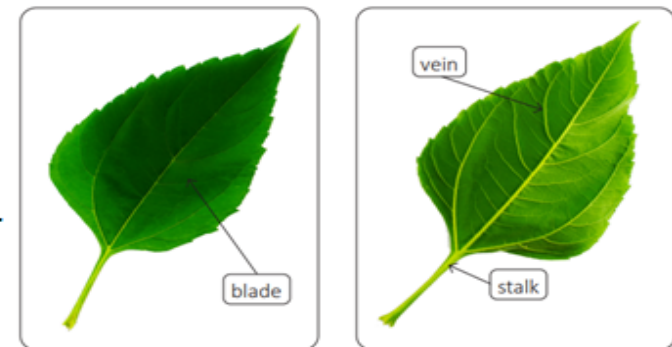
Stems

Stems have two main functions. They transport water, nutrients and food around the plant and they support the leaves and flowers. Stems transport water, nutrients and food around the plant through vessels called xylem and phloem. Xylem transport water and nutrients from the roots to the leaves. Phloem transport food made in the leaves to the rest of the plant. A stem also supports the flowers to attract pollinators and the leaves so they can capture sunlight.



Leaves

Leaves have two main functions. They make food for the plant through a process called photosynthesis. They also lose water from their underside in a process called transpiration. The structure of leaves allows them to carry out these functions. The blade captures sunlight, and the stalk and veins transport water into and out of the leaf.

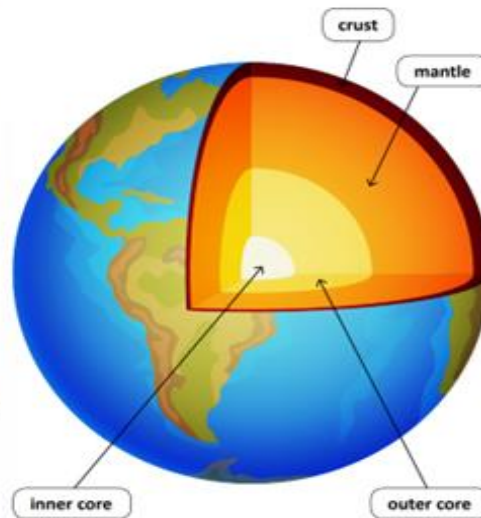


Knowledge Organiser: Geography

What is that noise under the ground? Year 3 Spring Term 2.1

Structure of the Earth

Earth is made up of four layers. These are the crust, mantle, outer core and inner core. The crust is a thin layer of rock on the surface that is broken into large pieces called tectonic plates. The mantle is made up of molten and semi-molten rock called magma. The outer core is a liquid layer of metal. The inner core is solid metal, and the hottest part of the Earth.



Volcanoes

Volcanoes are mountains or hills with vents at the top through which lava, gases and ash erupt. There are four different types of volcano. These are shield, stratovolcano, cinder cone and lava dome. Volcanoes are classed as active, dormant or extinct. Active volcanoes are likely to erupt again. Dormant volcanoes might erupt again in the future. Extinct volcanoes will not erupt again.



Plate Tectonics

The tectonic plates that make up the Earth's crust float on top of the mantle and are constantly moving. The places where tectonic plates meet are called plate boundaries. Tectonic plates can push together, pull apart or slide against each other. This movement at the plate boundaries can cause volcanic eruptions, earthquakes and tsunamis.



Knowledge Organiser: Geography

What is that noise under the ground? Year 3 Spring Term 2.1

Mary Anning

Mary Anning (1799-1847) was an English fossil collector. She lived in Lyme Regis in Dorset, in an area now known as the Jurassic Coast. Mary had little formal education but was taught fossil hunting by her father. She made many important fossil discoveries during her lifetime, including an Ichthyosaur fossil in 1811 and a fossilised Plesiosaur in 1823.



fossilised Plesiosaur skeleton



Mount Vesuvius

Glossary

Erode - Be gradually worn away.

Impermeable - Not allowing water to pass through. Also described as waterproof.

Lava - Hot, molten rock that comes out of a volcano.

Liquid - A material that is runny, can be poured easily and takes the shape of its container.

Magma - Hot molten rock found in the Earth's mantle.

Molten - Metal or rock that is in a liquid state because of great heat.

Organic matter - Dead and decaying plants and animals.

Ring of Fire - Area around the Pacific Ocean where many earthquakes and volcanic eruptions occur.

Tectonic plate - A large, slow-moving piece of rock that makes up the Earth's crust.

Vent - An opening in the Earth's crust through which lava escapes.

Volcanic eruption - The sudden and violent explosion of lava, gas, ash and rock out of a volcano.

Knowledge Organiser: Art



Ammonite

Relief printing



1. Carve a picture or pattern into a printing block.



2. Use a roller to cover the block with printing ink and press it onto paper.



3. Peel the paper off the block to reveal the print. The raised areas of the printing block will have printed onto the paper. The recessed areas will have left the paper ink-free.

Two-colour relief print

A two-colour relief print can be made in different ways.



Two-colour roller technique

Apply one colour all over the printing block with a roller. Apply a different colour on top of the first colour, but only in certain areas, leaving some of the first colour showing through.



Reduction printing

Create a print using one colour first and then cut away more areas on the printing block before printing again.

Clay sculpting techniques



Carving

Cutting away clay to make patterns and shapes.



Coiling

Using several long, thin strips of clay to create sculptures or the walls of a pot.



Rolling

Using a rolling pin to create a flat slab of clay or the palms of the hands to create long, thin strips.



Scoring

Scratching marks into the surface to make a strong join between two pieces of clay.



Stretching

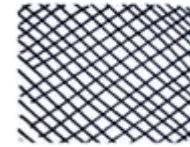
Pulling clay to make it longer or wider.

Drawing techniques

Artists use a variety of drawing techniques to create tone, texture and form in their work.



Hatching is the use of parallel lines to shade an area. Increasing the number, thickness or closeness of the lines creates a darker tone.



Cross-hatching is the use of parallel lines that are placed at angles to each other to shade an area. Increasing the number, thickness or closeness of the lines creates a darker tone.



Shading is the use of pencil or other media to create darker and lighter areas. Using more pressure or darker tones of colour creates darker areas. Using less pressure or lighter tones of colour create lighter areas.



Stippling is the use of dots to shade an area. Dots that are close together create dark tones and dots that are spaced apart create lighter tones.



Smudging is the use of fingers or a blending stump to smooth areas that have been shaded using hatching, cross-hatching, shading or stippling techniques.

Home Learning and Useful Links:

This half term our school value will be '**Curiosity**'. Please discuss what this means with your child.

Please talk to your children about the information contained within the Curriculum Overview and the Knowledge Organisers, as they contain information that is crucial to aiding their understanding of topics that we will be covering in class.

Please ensure that your child reads to an adult at home every day. We would like an adult to make a comment in the reading diary. Please return the reading books by **Wednesday** so they can be changed.

We highly recommend that children practice their times tables daily in order to increase fluency.

Useful Links:

Reading:

[Oxford Owl for School and Home](#)

[Reading and comprehension - English - Learning with BBC Bitesize - BBC Bitesize](#)

[Books for Year 3 children aged 7-8 | School Reading List](#)

Writing:

[Year 3 English - BBC Bitesize](#)

[Writing in Year 3 \(age 7-8\) - Oxford Owl for Home](#)

[Spelling and Grammar, English Games for 7-11 Years - Topmarks](#)

Maths:

[Year 3 Maths Curriculum Toolkit | 7 & 8 Year Olds | Home Learning \(thirdspacelearning.com\)](#)

[YEAR 3 MATHS - Topmarks Search](#)
[IXL - Year 3 maths practice](#)

[Times Table Rockstars](#)

[Multiplication Check Practice](#)

Science:

[Moving on different surfaces - BBC Bitesize](#)

[What do plants need? - BBC Bitesize](#)

[The structure of plants - BBC Bitesize](#)

Geography:

[What are latitude and longitude? - BBC Bitesize](#)

[What are volcanoes? - BBC Bitesize](#)

[What are earthquakes? - BBC Bitesize](#)