

### This term's Big Question:

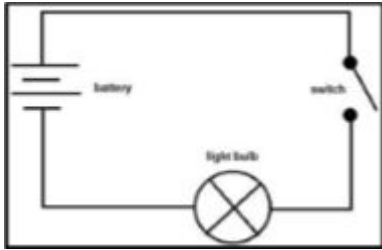
What can be done to reduce the number of casualties when a volcano erupts?

### Science - electricity

How can we use the knowledge of electricity and coding to create a warning system?

Key vocabulary:

Circuit, conductor, connector, contact, electrode, frequency, insulation, negative, positive, input, output, voltage, surge cells, wires, bulbs, switches, buzzers, battery, circuit, series, conductors, insulators, amps, volts.



### In this project children will learn:

to design and make a real and purposeful electrical warning system with various outputs to protect the global community from further natural disasters.



## Harriers Banbury Academy Year 6 Knowledge Organiser Term 1 Aspirations: Belonging and Curiosity and Creativity

### Maths

Place Value: compare, digit, order, rounding, value, worth, greater than, less than, equal to, million, thousand, times, interval.

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

Fractions: ordering, comparing rounding, adding, subtracting, multiplying, dividing, denominator, numerator, lowest common multiple, highest common factor.

$$\frac{3}{5}$$

← numerator  
← denominator

Greatest Common Factor

$$\frac{8}{12} = \frac{2}{3}$$

+4     +4

Ratio: unequal/equal amounts, scaling, proportion

### RSE - Me and my relationships

Bullying, bystander, responsibility, peer pressure/influence, friendship, feelings, collaboration, conflict, resolution, respect, assertiveness and appropriate touch.

### Trips, visits and events

13th September - Roald Dahl Day  
4th & 6th October - Parents evenings  
6th October - National Poetry Day  
Week 7 - Harvest festival (dates to be confirmed)

### English

Writing: punctuation to correctly structure my sentences, range of clauses to add variety to my writing and persuasive language to engage the reader.

Grammar key vocabulary: subject, verb, object, nouns, verbs, adverbs, adjectives, pronouns, conjunctions (subordinating and coordinating) and passive voice, modal verbs

Spelling: a selection of sounds will be taught and broken down into their many graphemes. Their sounds will include ay, e, ee, i and igh.

### P.E.

Tag rugby - apply individual skills learned in a range of game situations. These will include basic formations, defensive skills, attacking skills and communicating specific game related information.

Hockey - apply individual skills learned in a range of game situations. These will include dribbling, ball control, passing and shooting.

### Computing

Internet, device, power, output, control, safety, light, warning, detector, microbit



### Spanish

uno	30	treinta
dos	40	cuarenta
tres	50	cincuenta
cuatro	60	sesenta
cinco	70	setenta
seis	80	ochenta
siete	90	noventa
ocho		
nueve		

### Music

How Does Music Bring Us Together?  
Getting Started with Music Tech: This Unit of Work celebrates a wide range of musical styles, supporting the key areas of the music curriculum; Listening, Singing, Playing Composing and Performing.

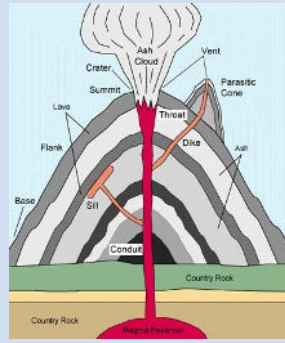


# Key Stage 2 Geography Natural Disasters



## Prior learning

- Understand the earth's key physical and human process and how these have changed over time with (locational knowledge).
- Understand key topographical features (including mountains and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- Locate the world's countries, using maps to focus on Europe concentrating on their environmental regions, countries, and major cities.
- Know the continents of the world and locate them on a map.
- Use Geographical skills and fieldwork.
- Use maps, atlases, globes and digital/computer mapping to locate a region
- studied.



## Key knowledge

By the end of the term, the children will have gained the following knowledge and skills:

- Pupils will become the designers of a real and purposeful product, to design a volcano warning system using their knowledge of electrical circuits.
- Pupils will need to understand correct geographical words to describe a place.
- Pupils must consider and discuss how the earth is structured and identify the position and significance of the Northern Hemisphere and Southern Hemisphere.
- Pupils will need to be able to explain how comp components can affect the output of a circuit and whether it works or not. They will also need to make links between things they have learnt and things they already know in relation to electricity.
- Pupils will need to design, plan and create programs that accomplish specific goals, including controlling or simulating physical system. They will need to be explain their reasoning behind their project decisions.
- Pupils will need to work with others and be able to evaluate products identifying strengths and possible changes they might make

## High frequency vocabulary (tier 2)

country	rivers	food	south
city	land-use	minerals	west
region	climate zones	oceans	volcano
hills	biomes	maps	earthquake
mountains	natural resources	north	lava
coasts	energy	east	magma

## Subject specific vocabulary (tier 3)

- Longitude — is measured by imaginary lines that run around Earth vertically (up and down).
- Latitude — is measured by imaginary lines that run around Earth vertically (left and right).
- Equator — a line notionally drawn on the earth equidistant from the poles.
- Tropic of Cancer — the most northerly circle of latitude on Earth at which the Sun can be directly overhead.
- Tropic of Capricorn — southernmost latitude reached by the overhead Sun.
- Tectonic plate — a massive slab of solid rock in the Earth's crust and upper mantle.
- Crust — outer most layer of the earth made up out of tectonic plates.
- Mantle— mostly-solid bulk of Earth's interior.
- Outer Core — super-heated liquid lava made of iron and nickel.
- Inner core — solid lava made of iron and nickel.
- Ash cloud — the cloud of ash formed above the volcano.
- Lava flow — after erupting, some of the hot lava will flow down the sides of the volcano.
- Main vent — primary opening of the volcano.
- Secondary vent — secondary openings through which magma and other rocks can escape.
- Conduit — the underground passage through which the magma flows. Connects to the vent.
- Crater— the crater is the mouth of the volcano which surrounds the vent.
- Magma — molten rock that is underground.
- Lava — molten rock that is underground.
- Divergent — tectonic plates that move away from each other creating valets and ocean trenches.
- Convergent — tectonic plates that move towards each other forming mountain ranges.
- Transform — tectonic plates that move alongside each other in opposite directions causing earthquakes.
- Active Volcano — a volcano which is either erupting or is likely to erupt in the future.
- Dormant Volcano — volcano that has erupted in the past but is unlikely to erupt soon.
- Extinct Volcano — volcanoes that are not expected to erupt in the future.

## Key concept questions

Can I use a map/atlas to effectively locate different locations?

Can I explain the different parts of a volcano?

Can I explain how tectonic plates form the crust of the earth and how they interact with each other?

## Key places

Ring of Fire—The Ring of Fire, also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterised by active volcanoes and frequent earthquakes. The majority of Earth's volcanoes and earthquakes take place along the Ring of Fire.

## Detail

