

Year 4 Summer 1 Project overview— Eruptions and Disruptions

Big Idea: Is it a good idea to settle near a volcano?

Within this journey the children explore the structure of the Earth, why this causes natural disasters and the impacts of these on people and the land. Using this knowledge, children learn about the steps that can be taken to keep people safe and draw conclusions as disaster investigators.

HOOK: Pompeii - investigating a disaster

OUTCOME: Volcano documentary premieres - red carpet event

Applied Literacy:

Write an explanation text about earthquakes
Write a documentary script about volcanoes.

Applied Mathematics:

Statistics: interpreting and presenting data

Pupil Premium Curriculum Enhancement:

Language pre-teach and video about the Ring of Fire and volcanoes.

Geography: Key concept - Settlement

Children to use maps to locate tectonic plate boundaries and the different types. We will investigate where volcanoes can be found and look for patterns. Children will explore the structure of the Earth and a volcano to understand why they erupt. Using case studies, we look at the positive and negative impacts of volcanic eruptions.

Computing: Key concept - Information Technology

Children we will use flipgrid to create a documentary about natural disasters.

Key concept - Digital Literacy

Using Excel to create graphs to answer the questions **Are volcanic eruptions becoming more common? Do the tallest volcanoes cause the most deaths?**

Science: Key concept - Physics

Children will learn how sound travels, how pitch is determined by physical features, how volume changes with the strength of vibrations and how volume decreases over distance to answer the big question **What should someone who has settled in a disaster zone put in their go bag to attract attention?**

SMSC and Personal Skill:

To be curious

Cultural—impact of a natural disaster on people

Community links/ Enterprise/ Experiences:

Home learning: find out about the structure of the earth and present in chosen outcome (3D model, digital, poster)

Big Idea: Is it a good idea to settle near a volcano?

SJS Geographers

Key concept: Settlements

Eruptions and Disruptions!



In this Geography project, as **DISASTER INVESTIGATORS** you will learn about the physical and human impacts of earthquakes and volcanoes.

I will learn...

- the Earth is made of 4 distinct **layers**
- that the crust is in pieces called **tectonic plates** that move.
- that earthquakes and volcanoes are caused by the movement of these tectonic plates and be able to locate volcanoes on a thematic map.
- to name the **key parts of a volcano** and explain **why** and **how** a volcano **erupts**
- about **short** and **long, physical** and **human, positive and negative** impacts of a volcanic eruption.
- about **technology** that has been created to **predict** natural disasters and **protect** people.

What I already know...

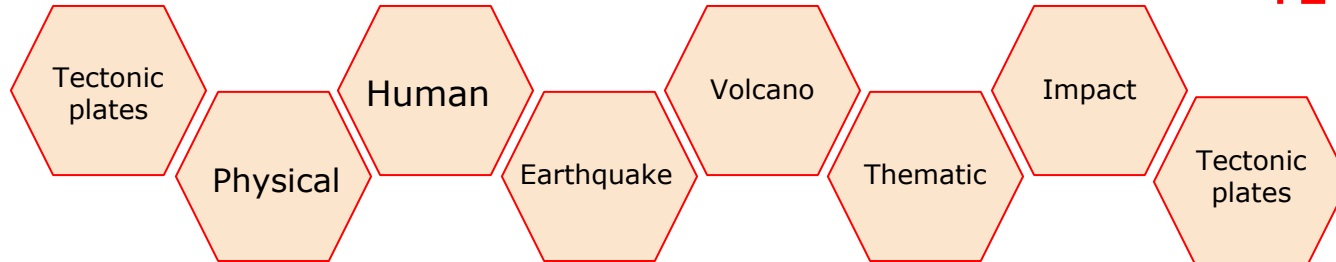
How to use different types of **maps** (OS, climate and historical) - *Southampton Through Time Y3 and Ticket to Ride Y4*

How to read **4 figure grid references** on OS maps —*Shirley Cruises Y3*

Where the UK is in the world and where we live *Southampton Through Time Y3*

How changes impacted Liverpool over time. *Ticket to Ride Y4*

Key Vocabulary:



Our Personal Skills:



What I already know...

I can identify, name, draw and label the basic parts of the

human body and say which part of the body is associated with each sense (Y1)

SJS Scientists



Big question: What should someone who has settled in a disaster zone put in their go bag to attract attention?

In this science phase, we are learning about SOUND. We will explore and investigate sound in order to find out the best thing to use to attract attention in an emergency.

I will learn to..

- identify how sounds are made, associating some of them with something vibrating
- recognise that vibrations from sounds travel through a medium to the ear
- find patterns between the pitch of a sound and features of the object that produced it
- find patterns between the volume of a sound and the strength of the vibrations that produced it
- recognise that sounds get fainter as the distance from the sound source increases.

The skills I already have are...

- Predicting an outcome using "because"
- Setting up an experiment to answer a question

The skills I will learn are

- predicting using scientific knowledge.
- testing and retesting according to our results

Tectonic plates

Pitch

Travel

Volume

Sound

Sound source

Sound wave