

The Abbey Hill CURRICULUM

How do we
survive an
Angry Earth?

Achieving our dreams together





How do we survive an angry earth?



Key Idea:



Volcanoes roar, rivers rise, and the Earth shifts beneath our feet—natural disasters have shaped human history for thousands of years. From the buried city of Pompeii to the flooded streets of the Peak District, these powerful events leave lasting marks. Yet they don't affect everyone equally. Discover how volcanoes form, why some communities face greater risks, and what we can learn about justice, safety, and resilience in the face of nature's force.

We will:



Film and share an interactive newsroom bulletin documenting a natural disaster we have learnt about.

Core Text:



When The Mountains Roared
Jess Butterworth



Core Knowledge



1. Volcanoes form when pressure from the Earth's interior forces magma through cracks in the crust, causing eruptions.
2. Volcanoes are found along tectonic plate boundaries, especially in the Pacific Ring of Fire.
3. In AD 79, Mount Vesuvius erupted.
4. The UK has extinct volcanoes, like Glen Coe in Scotland, formed millions of years ago
5. The Thames Flood Barrier protects London from dangerous storm surges.
6. The 2019 Peak District floods, caused by heavy rainfall, flooded towns like Matlock and nearby areas.
7. [E&D: Natural Disasters and Social Justice: Natural disasters can disproportionately affect people and support afterwards can vary.](#)
8. People live near volcanoes and fault lines because of the fertile land and resources, despite the risk of disasters.

Disciplinary Knowledge



Being a Geographer:

Know geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom and a region in a European country.

Know the locations of the world's countries,

Know the world's environmental regions.

Know key aspects of physical geography - volcanoes and earthquakes.

Know that fieldwork is used to observe, measure and record the human and physical features in the local environment.

Know how to use Ordnance Survey maps to build their knowledge of the UK.

Being a Historian:

Know that the consequences of actions or events in history may affect different peoples differently.





Lesson 1: Making a Model Volcano and Eruption

Section	Details
Learning Intention	Create a practical model volcano that erupts, demonstrating volcanic activity.
Disciplinary Knowledge	Know key aspects of physical geography - volcanoes.
Key Knowledge	Volcanoes form when pressure from the Earth's interior forces magma through cracks in the crust, causing eruptions.
What the Teacher Does	Demonstrates how to construct a simple erupting volcano using baking soda and vinegar. Guides pupils through safety and procedural steps, ensuring understanding of the chemical reaction behind eruptions. Supports pupils during the hands-on activity with encouragement and troubleshooting.
What the Children Do	Follow instructions carefully to build their own volcano models, engage in the eruption process, observe the chemical reaction, and describe what happens during the eruption in their own words.
How the Lesson is Evidenced	Photos or videos of erupting volcano models.
Adaptation	Resources & Aids: step-by-step visual instructions; supervised practical work.

Lesson 2: How Are Volcanoes Formed?

Section	Details
Learning Intention	Understand how pressure from the Earth's interior forces magma through cracks, causing volcanic eruptions.
Disciplinary Knowledge	Know key aspects of physical geography - volcanoes and earthquakes.
Key Knowledge	Volcanoes form when pressure from the Earth's interior forces magma through cracks in the crust, causing eruptions.
What the Teacher Does	Explains the process of volcanic formation using clear diagrams and animations. Models key vocabulary such as magma, crust, and eruption. Leads a Q&A to check understanding and clarify misconceptions.
What the Children Do	Observe diagrams and animations attentively, label parts of a volcano as a cross section lift-the-flap, answer teacher's questions, and then explain volcanic formation in their own words using key vocabulary.
How the Lesson is Evidenced	Completed labelled volcano diagrams.
Adaptation	Dual coding with visuals and diagrams; chunking vocabulary.





Lesson 3: Locating Volcanoes on a World Map

Section	Details
🎯 Learning Intention	Identify where volcanoes are found globally, especially along tectonic plate boundaries.
🧠 Disciplinary Knowledge	Know locations of the world's countries and environmental regions.
📖 Key Knowledge	Volcanoes are found along tectonic plate boundaries, especially in the Pacific Ring of Fire.
👩‍🏫 What the Teacher Does	Introduces the concept of tectonic plates and shows pupils how to use world maps and atlases to locate volcanoes, especially within the Pacific Ring of Fire. Models map skills such as grid referencing and use of symbols for volcanoes. Guides pupils through map reading exercises.
👦 What the Children Do	Use atlases and maps to find and mark locations of volcanoes, particularly around the Pacific Ring of Fire, label key areas, and explain why volcanoes are concentrated in these regions based on plate tectonics.
📷 How the Lesson is Evidenced	Annotated maps showing volcano locations. This should be a formal map and include use of grid references.
♿ Adaptation	Preteaching key vocabulary; use of labelled maps for support.

Lesson 4: Pompeii in AD 79 — What Happened?

Section	Details
🎯 Learning Intention	Understand the eruption of Mount Vesuvius in AD 79 and its impact.
🧠 Disciplinary Knowledge	Know consequences of historical events affecting different peoples.
📖 Key Knowledge	In AD 79, Mount Vesuvius erupted.
👩‍🏫 What the Teacher Does	Narrates the story of Pompeii's eruption using vivid images and primary source excerpts such as Pliny the Younger's letters. Helps pupils sequence events and understand the widespread destruction and consequences. Encourages reflection on how people's lives were affected differently.
👦 What the Children Do	Create timelines or storyboards that sequence the eruption events, discuss the impacts on Pompeii's residents, and reflect on the social and environmental consequences of the disaster.
📷 How the Lesson is Evidenced	Timelines or storyboards.
♿ Adaptation	Chunking tasks; use of visual timelines.





Lesson 5: Pompeii Today — Exploring Archaeology

Section	Details
🎯 Learning Intention	Explore what remains of Pompeii and how archaeology reveals the past.
🧠 Disciplinary Knowledge	Know how fieldwork is used to observe and record features of environments.
📖 Key Knowledge	In AD 79, Mount Vesuvius erupted.
👩‍🏫 What the Teacher Does	Shares photos and videos of Pompeii's ruins and archaeological artefacts. Explains how archaeologists uncover history. Models analysis of images and how to interpret archaeological evidence.
👦 What the Children Do	Examine and annotate images of Pompeii ruins, create labels identifying key features, and write thought bubbles imagining the life of Pompeii residents before and after the eruption.
📷 How the Lesson is Evidenced	Annotated images with thought bubbles.
♿ Adaptation	Dual coding with images and writing; sentence starters.

Lesson 6: Responding to Pompeii Photos — Thought Bubbles

Section	Details
🎯 Learning Intention	Analyse images of Pompeii and express possible thoughts and feelings of people affected by the eruption.
🧠 Disciplinary Knowledge	Know consequences of historical events may affect different peoples differently.
📖 Key Knowledge	In AD 79, Mount Vesuvius erupted.
👩‍🏫 What the Teacher Does	Presents evocative photos of Pompeii and models creating thought bubbles that reflect possible emotions, fears, and hopes of Pompeii's inhabitants. Supports pupils with sentence starters and prompts to encourage empathetic responses.
👦 What the Children Do	Engage in conscience alley and roll-on-the-wall to reflect and gather emotions. Record as a PicCollage include a reflective thought bubble.
📷 How the Lesson is Evidenced	PicCollage with thought bubbles.
♿ Adaptation	Scaffolded writing frames; visuals to support empathy.





Lesson 7: Haiti Earthquake — Natural Disasters and Social Justice

Section	Details
Learning Intention	Understand how natural disasters like earthquakes affect different communities and explore social justice issues.
Disciplinary Knowledge	Know that natural disasters can disproportionately affect people and support afterwards can vary.
Key Knowledge	E&D: Natural disasters can disproportionately affect people and support afterwards can vary.
What the Teacher Does	<ul style="list-style-type: none"> • Share detailed information, photographs and video clips about the 2010 Haiti earthquake to build understanding of the event and its impact. • Facilitate a sensitive class discussion exploring how and why communities are affected differently, including geography and development. • Introduce examples of aid organisations: British Red Cross: emergency medical care, food, clean water and shelter. Disasters Emergency Committee (DEC): raised funds to provide aid, healthcare and support rebuilding homes and communities. • Draw links to fairness and social justice, highlighting why support varies.
What the Children Do	<p>Listen and engage with images/videos then take part in structured discussion, sharing ideas and responding to others. Reflect on learning and give written response to key questions:</p> <ul style="list-style-type: none"> • How does learning about the Haiti earthquake make you feel and why? • How did the British Red Cross help people after the earthquake? • How did the Disasters Emergency Committee (DEC) support people in Haiti? • Why are some places more affected by natural disasters than others (e.g. location, buildings, money)?
How the Lesson is Evidenced	Written responses to each question in books
Adaptation	Use of visuals and video Chunking

Lesson 8: UK Extinct Volcanoes — Glen Coe and More

Section	Details
Learning Intention	Identify extinct volcanoes in the UK and understand their formation millions of years ago.





Lesson 10: Our own flood defence testing

Element	Content
Learning Intention	Understand causes and impacts of flooding, and how flood defences protect communities.
Disciplinary Knowledge	Know key aspects of physical geography and human impact on environments.
Key Knowledge	The Thames Flood Barrier protects London from dangerous storm surges. The 2019 Peak District floods flooded towns like Matlock.
What the Teacher Does	<p>Explain the causes of flooding (e.g. heavy rainfall, rivers overflowing, storm surges) using clear visuals and examples.</p> <p>Recap on images/videos of the Thames Flood Barrier and Peak District floods to build real-world understanding.</p> <p>Video example of how flood defences work, including barriers, walls and natural solutions.</p> <p>Introduce the practical challenge: designing and building a flood barrier to protect a “community” (e.g. small model houses).</p> <p>Facilitate discussion around what makes an effective barrier and link to real-world engineering.</p>
What the Children Do	<p>Design their own flood barrier</p> <p>Build their barrier using provided resources</p> <p>Test their design by simulating a flood</p> <p>Evaluate their barrier, explaining what worked well and what could be improved.</p>
Teacher Setup & Implementation Tips	<p>Prepare a clear testing area (e.g. trays, gutters or shallow containers)</p> <p>Create simple “community” models in advance (e.g. small boxes or Lego houses) that pupils must protect.</p> <p>Provide a range of materials but keep it manageable (e.g. cardboard, foil, plastic sheets, tape) to avoid overwhelm.</p> <p>Be explicit about success: the goal is to slow, redirect or stop water reaching the “community</p> <p>Build in time for reflection immediately after testing so learning is not lost.</p>
How the Lesson is Evidenced	Photographs or videos of testing process
Adaptation	Grouping and support



Knowledge Organiser

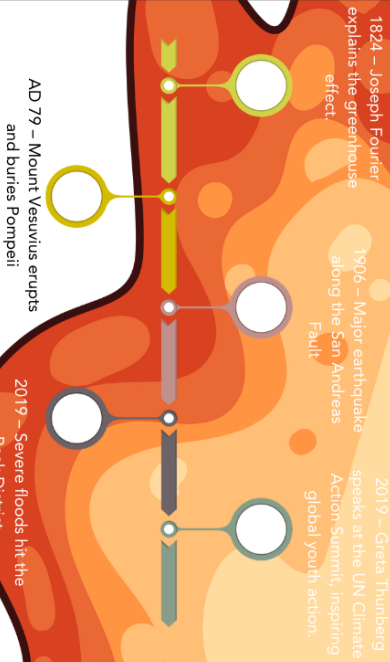
HOW DO WE SURVIVE AN ANGRY EARTH?

Have you ever wondered why the ground shakes, volcanoes erupt, or heavy rain causes floods? Natural disasters are powerful events caused by the Earth's natural processes. They can quickly change landscapes and affect how people live. Scientists study these events to help communities prepare and stay safe. In this topic, you will explore volcanoes, earthquakes, floods and extreme weather, and learn why our planet is always changing.

Key Knowledge

Volcanoes erupt when pressure inside the Earth forces magma through cracks in the crust.
Volcanoes are mostly found at tectonic plate boundaries, especially around the Pacific Ring of Fire.
The San Andreas Fault in California is where two plates slide past each other, causing earthquakes.
In AD 79, Mount Vesuvius erupted and buried Pompeii in ash, preserving the city.
The UK has extinct volcanoes, including Glen Coe in Scotland, formed millions of years ago.
Natural disasters include earthquakes, floods, hurricanes and tornadoes, caused by tectonic movement or extreme weather.
In 2019, heavy rain caused severe flooding in the Peak District, affecting places like Matlock.
People sometimes live near volcanoes and faults because the land is fertile and rich in resources.

TOPIC TIMELINE



FAMOUS 3



Pliny the Younger – Described the eruption of Mount Vesuvius in AD 79.



Katia Krafft – Studied volcanoes to help people understand eruptions.



Charles F. Richter – Created the Richter scale to measure the strength of earthquakes.

GLOSSARY

Biome – A large area with similar climate, plants, and animals.
Climate – The long-term pattern of weather in a region.
Ecosystem – A community of living things interacting with their environment.
Greenhouse Effect – The way Earth's atmosphere traps heat, keeping the planet warm.
Pollution – Harmful substances released into the environment.
Recycle – To reuse materials to make new products.
Renewable Energy – Power from natural sources like wind or sun that don't run out.
Sustainability – Using resources in a way that protects them for the future.



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