Morpeth First School Knowledge Organiser

Geography	Year group	Term
Volcanoes	Year 3	Autumn 1

Background knowledge

A volcano is an opening in the Earth's crust that allows magma, hot ash and gases to escape. Volcanoes can look like mountains or small hills, depending on what type they are. When magma reaches the surface of the Earth it is called lava and comes out of the volcano as a volcanic eruption, along with gases and ash.

Resources

Planbee and Twinkl resources on Staff Shared

What should I already know?

Year 2

I can name and locate the world's 7 continents and 5 oceans. I understand the geographical similarities and differences through studying the human and physical geography of a small area of the UK, and of a small area in a contrasting non-European country.

I can use simple fieldwork to study the key human and geographical features of the area surrounding my school and make comparisons to another, contrasting area.

I can make observations about why things happen.

I have used an atlas, globe, OS and aerial maps. I have looked at maps on different scales. I can follow directions including the use of NSEW.

I am beginning to express my own views about a place, location and or environment and am beginning to give a relevant reason to support my likes and dislikes and preferences.

I can use basic geographical vocabulary to refer to key physical features such as: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, sooil, valley, vegetation, season and weather and to key human features such as:

city, town, village, factory, farm, house, office, port, harbour and shop

National Curriculum Objectives / Key Skills

Locational knowledge

Locate the world's countries, using maps to focus on Europe and North and South America, concentrating on their environmental regions, key physical and human characteristics , countries and major cities.

Place knowledge

Understand geographical similarities and differences through the study of humans and physical geography of a region of the United Kingdom and... a region of North or South America.

Human and physical geography

Describe and understand key aspects of physical geography, including: volcanoes.

and describe and understand key aspects and human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water in relation to living near a volcano.

Extend their knowledge about one of the most significant physical features of the world.

Develop their geographical knowledge and skills.

The Journey

- 1. Find out about what a volcano is and locate some of the world's most famous volcanoes using maps, globes and atlases. Discuss where the volcanoes are located in relation to the Equator, Northern and Southern Hemisphere.
- 2. Learn what happens when a volcano erupts and what causes the eruption. Draw diagrams of volcanoes and begin to understand the impact volcanic eruptions have on the surrounding area. Build a model volcano and make it erupt.
- 3. Find out about the three types of volcano (composite, shield and dome), how they are formed and how they are different. Find out about extinct, active and dormant volcanoes.
- 4. Learn and understand what tectonic plates and which plates different countries lie on. Learn about how the plates move and how this causes volcanoes and other natural disasters. Find out about the 'ring of fire'.
- 5. Explore life in a volcanic area and what the various benefits of this can be for people, such as fertile land and mining opportunities.
- 6. Compare a volcanic area to a non-volcanic area (Hawaii and Morpeth). Consider how life is different, what are the similarities and differences? Why would people have a different view about living near a volcano?

Outcomes

An overview of what children will know / can do

Developing: With support I can highlight where volcanoes are located. I know what happens when a volcano erupts. I know some features of a volcano and know that there are three types of volcano. I can identify the ring of fire. I can research similarities and differences between my local area and Hawaii (volcanic and non-volcanic area). I can talk about what effects a volcanic eruption has on the environment. I can create and erupt a model volcano.

Secure: I can locate volcanoes on large scale maps and globes. I know what happens when a volcano erupts. I know some features of a volcano and know that there are three types of volcano. I can identify the ring of fire. I can research similarities and differences between my local area and Hawaii (volcanic and non-volcanic area) and begin to explain different views of people. I can talk about what effects a volcanic eruption has on the environment and begin to ask questions as well as giving my own opinion and supporting this with relevant reasons. I can ask and respond in more detail to geographical questions e.g. where is this location and what do you think about it? I can identify and explain my own views and that of others.

Mastery: I can locate volcanoes on large scale maps and globes. I know what happens when a volcano erupts. I know some features of a volcano and know that there are three types of volcano. I can identify the ring of fire. I can research similarities and differences between my local area and Hawaii (volcanic and non-volcanic area) and explain different views of people. I can talk about what effects a volcanic eruption has on the environment and ask questions as well as giving my own opinion and supporting this with relevant reasons. I can confidently ask and respond in more detail to geographical questions e.g. where is this location and what do you think about it? I can confidently identify and explain my own views and that of others.

Key Vocabulary

lava - hot molten, semi-fluid erupting from a volcano
magma - hot fluid below the earth's crust which becomes lava when an eruption happens
vent - an opening of a volcano through which lava erupts
crater - a large hollow forming the mouth of a volcano
dormant, extinct, active - Volcanoes are classified as active, dormant, or extinct. Active
volcanoes have a recent history of eruptions; they are likely to erupt again. Dormant
volcanoes have not erupted for a very long time but may erupt at a future time. Extinct
volcanoes are not expected to erupt in the future.
tectonic plates -pieces of Earth's crust and uppermost mantle
Composite , shield and dome - three types of volcano

Assessment questions / outcomes

- 1. Can you name 3 well known volcanoes? Can you locate them on a globe and say which continent they are in?
- 2. What are the 3 types of volcano? How are volcanoes classified?
- 3. What are tectonic plates? What do we mean when we say the 'ring of fire?'
- 4. Describe how the earth is made up of different layers and what happens to these layers when a volcano erupts?
- 5. Why would people choose to live near a volcano? Are there economic benefits?
- 6. How does life differ in a volcanic and non-volcanic location?