Year 4 - Autumn 2

Geography-Location and Place/Volcanoes



Earth's crust

HeathfieldSchools'Partnership

The children will continue to build on their location and location and place knowledge including using 8 compass points, 2 and 4 figure grid references and have an understanding of longitude and latitude. In this unit, children will also build on their understanding of physical features of landscapes which they have studied previously such as vegetation belts, mountains and rivers, to explore how volcanoes are formed. They will learn about the layers of the Earth, tectonic plate movements and create a clay model of the cross section of a volcano. Using their knowledge of where volcanoes are located, they will debate whether or not the base of a volcano would be a good place to build a settlement, thinking about the pros and cons of living in a volcanic region.

old layers

Key knowledge

- A volcano is a very deep hole in the Earth's top layer that can let out hot gasses, ash and lava.
- Many volcanoes have long vents that go all the way down through the Earth's first layer, the crust, to magma in between the crust and the mantle (the Earth's second layer).
- It's so hot there that rocks melt into liquid. This is called magma, which travels up through volcanoes and flows out as lava.
- \bullet . There are three ways to describe a volcano and explain what it's doing
 - active, erupting, and dormant When a volcano erupts, magma comes up and out through the vents.
- Some volcanoes are underwater.

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There are no longer any volcances in the UK. The largest volcano in Europe is Mount Etna in Sicily (Italy).

Latitudes are horizontal lines that measure distance north or south of the equator. Longitudes are vertical lines that measure east or west of the meridian in Greenwich, England.

8 Compass points: N, NE, E, SE, S, SW, W, NW



Key vocabulary

<u>Longitude</u> Vertical lines around the earth Latitude – horizontal lines around the earth

<u>Core</u>: the core is at the centre of the Earth. There is a solid inner core and outer liquid core of molten metal.

<u>Crater</u>: the mouth of a volcano.

<u>Crust</u>: the surface layer covering our planet. There are 2 types of crust -oceanic and continental.

Eruption: a volcano erupts when it shoots out lava Lava: molten, hot rock flowing from a volcano.

Magma: a molten substance beneath the Earth's crust.

Molten: hot, melted rocks.

Physical features: Natural features of the landscape like seas, rivers, mountains and volcanoes.

<u>Volcano</u>: an opening or rupture in the Earth's crust through which lava, ash and gases escape.

