Welton Primary School—Geography Knowledge Organiser

Year: 3

Earthquakes and Volcanoes

What should I already know?

- Able to name and locate the seven continents of the world
- Know the names and location of the five oceans of the world
- Able to identify physical features
- Able to ask and respond to simple geographical questions

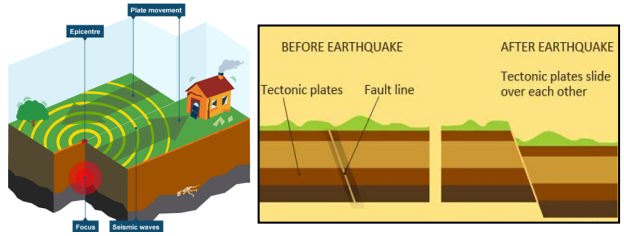
Vocabulary

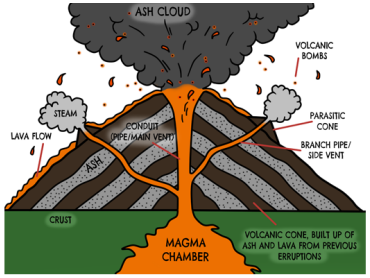
magma	Lava that is still underground
volcano	Openings where magma from inside the Earth can escape to the surface
active	Is erupting or has erupted recently
ash	Solid left when something burns
chamber	Underground area where molten rock collects
core	The central part
crater	Bowl shape at mouth of a volcano
crust	Outermost layer of the planet
dormant	Hasn't erupted for 10,000 years but could become active again
earthquake	Sudden violent movement of the Earth's surface
epicentre	Point at which an earthquake starts
eruption	Bursting out of material
extinct	Not erupted for 1,000,000 years and will probably never erupt again
fault line	Where 2 tectonic plates move by each other
lava	Hot liquefied rock
magnitude	Number that shows the power of an
mantle	Earth's interior beneath the crust and above the central core
seismic wave	Energy caused by earthquakes
tectonic plate	Pieces of the earth's crust
vent	Channel where magma erupts from

Earthquakes

- The Earth's crust is made up of many moving sheets of rocks called tectonic plates.
- The places where these plates meet are called fault lines. As they rub past each other, pressure can cause the plates to suddenly slip.
- This releases a large amount of energy and creates seismic waves that travel through the Earth. The waves are felt most strongly in close proximity to where the event takes place – an earthquake.

How an earthquake occurs

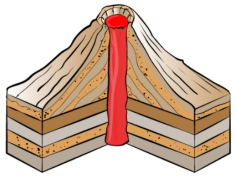




Volcanoes

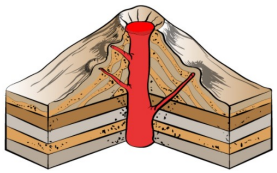
- As tectonic plates pull apart or are pushed underneath one another, magma is melted.
- Melted magma rises to the surface because it is lighter than rock.
- If the magma rises quickly or is too thick, gas cannot easily escape. This builds pressure.
- Magma can therefore erupt as lava through openings in the Earth's crust (volcanoes).

Types of volcano



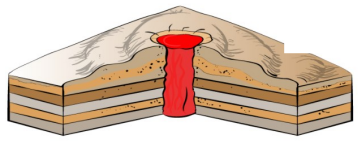
Cinder Cone

Most common type of volcano. When lava erupts, cinders are blown into the air. These fall to the ground to create a cone.



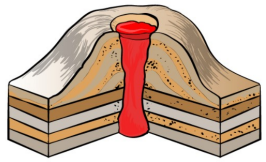
Composite

Steep slopes formed from thick sticky lava that doesn't flow far. Can have many vents.



Shield

Usually very large. Do not have gas or particle explosions. Have less steep sides.



Lava Dome

Usually smaller than other forms. Created when lava is too thick to flow very far. The dome grows slowly.

Volcanoes of Italy

Mount Vesuvius

Mount Stromboli

Mount Etna

Global distribution of volcanoes and earthquakes