

Alder Coppice Primary School — Knowledge Organiser

Geography

Year: 3

Unit 2: Mountains, Volcanoes and Earthquakes

Links to: Year 1 - UK

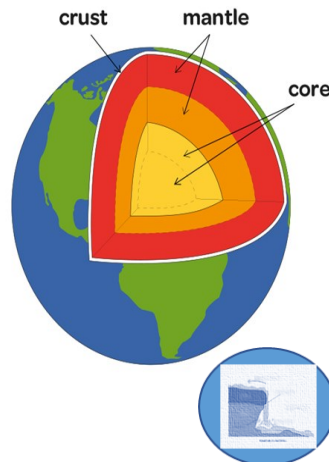
Year 2 - Continents & Oceans

Unit Specific Vocabulary:

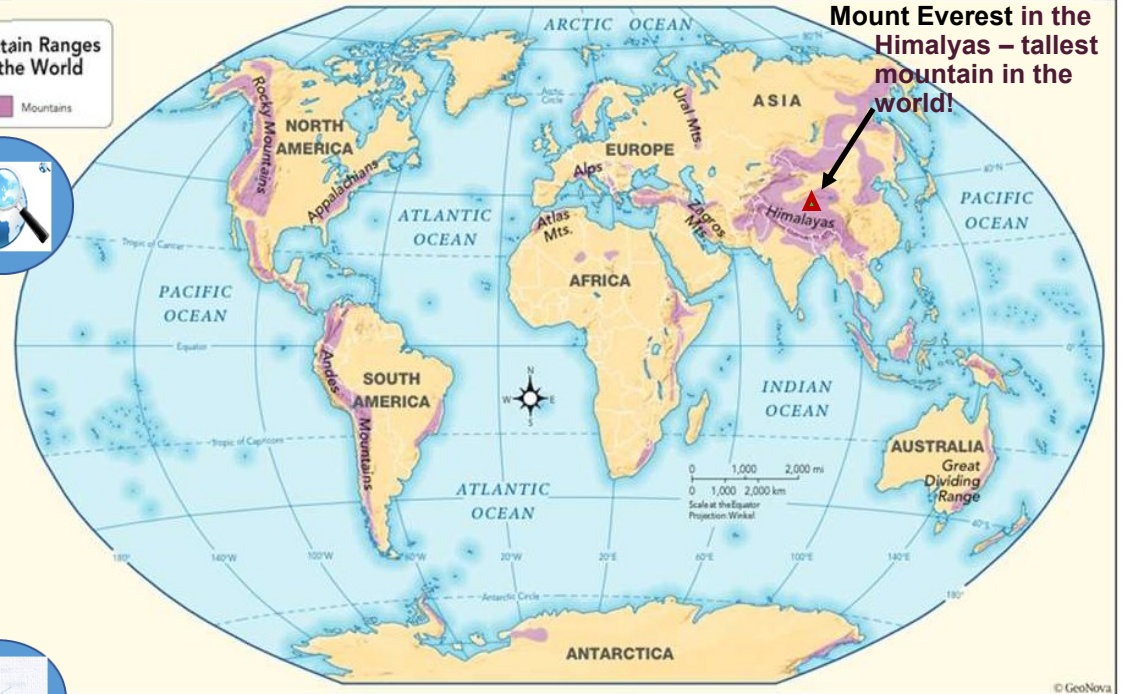
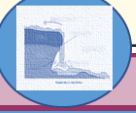
Volcano	A landform where molten rocks erupts through the surface of the Earth.
Earthquake	A sudden violent shaking of the ground.
Mountain	Something that's part of the land, but rises above everything else.
Mountain range	A group of mountains found together in one place.
Magma	Molten rock in the mantle.
Lava	Magma that has reached the surface.
Friction	Resistance or difficulty in moving. Tectonic plates are rough and so there is friction when they move.
Tectonic plate	Large broken pieces made of the Earth's crust – they are slow moving pieces which we call plates.
Pyroclastic flows	Fast moving clouds of hot ash, gas and rock that destroys anything in its path.

Structure of the Earth

Crust	Solid rock; 0-60km thick; continental (granite); oceanic (basalt); broken into tectonic plates.
Mantle	Liquid/ molten rock; ~2900km thick
Core (inner and outer core)	Liquid and solid metal; iron and nickel: ~5,400°C



Mountain Ranges of the World



Volcanoes

Shield volcanoes



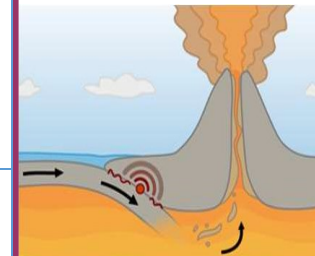
Largest volcanoes on earth; very wide, shaped like a bowl or shield with long gentle slopes made by the lava flows. Example: Kilauea (Hawaii) and Erta Ale (Ethiopia).

Stratovolcano (composite)



Most of the world's volcanoes are composite volcanoes: These are steep sided volcanoes made of layers of lava and ash; Magma is thick and explodes with burning rock and ash.

Volcanoes erupt when magma rises to the surface.



Earthquakes occur due to the slow movement of the tectonic plates jolting forward after getting stuck.

The advantages of living by a volcano include:

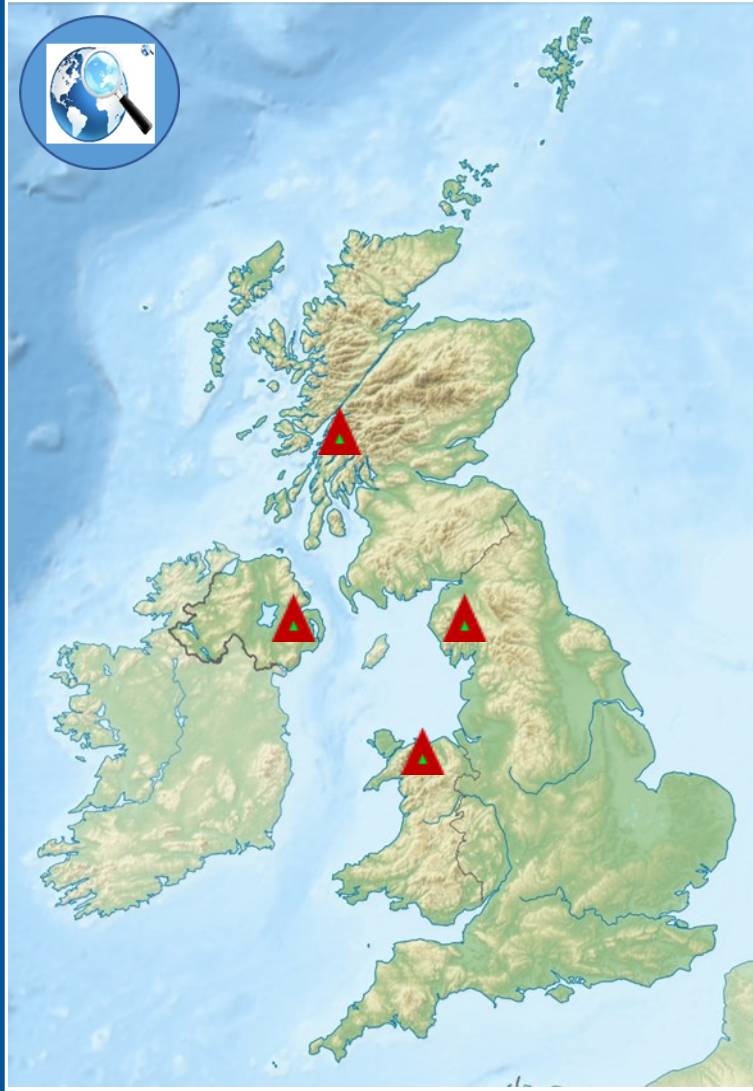
- **Fertile soil** that is good for agriculture
- The presence of **minerals**
- **Geothermal energy** to produce electricity
- **Tourism**: volcanoes attract millions of visitors every year

Volcanoes can be **active**, **dormant** or **extinct**.

Key Facts:

The highest mountains in the UK are:

- **Ben Nevis** in Scotland (also the highest in the UK)
- **Scafell Pike** in England
- **Slieve Donard** in Northern Ireland
- **Mount Snowdon** in Wales



Active Volcanoes, Plate Tectonics, and the "Ring of Fire"

