

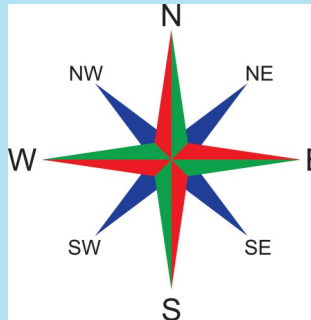


# Year 5 Geography

## Earthquakes and volcanoes

### Key Skills

- Describe how earthquakes are measured on the Richter scale.
- identify and describe which countries are most likely to experience earthquakes based on their geographical knowledge
- Make connections between their geographical understanding and their knowledge of scientific changes of state
- To give the location of places of geographical interest using four and six- figure grid references



### New Learning for Year 5

- Know & understand the structure of the earth: crust, mantle, outer core, inner core.
- Use a range of geographical sources of information to explore plate boundaries.
- Know how volcanoes are formed.
- Identify the 'Ring of Fire' on a world map and understand how this links to plate boundaries and how volcanoes are formed.
- Understand the similarities and differences between the main three types of volcano (composite, cinder cone and shield).
- Use geographical sources to explore land use on and around volcanoes.
- Identify the advantages & disadvantages of living on or near a volcano.
- Know what causes earthquakes (link back to tectonic plates) & where they occur.
- Know that earthquakes also happen in the UK (200-300 a year; most = too small to be felt; 20-30 quakes are felt in the UK each year)
- Know and understand the term 'epicenter'.
- Know what the Richter scale is and how it works.
- Explore how people in Japan have adapted to living in a high risk earthquake area (building design, warning systems, education).

### Key Vocabulary

topographical features	Physical features found in an area of land e.g. volcanoes, mountains, lakes. rivers.
lava dome volcano	Lava domes are volcanoes that are round shaped and made of viscous lava which does not flow far from it's vent.
shield volcano	A low, flat volcano formed from runny lava that cooled slowly.
composite volcano	Cone-shaped volcanoes. When composite volcanoes erupt, the lava is slow and sticky.
cinder cone volcano	Cinder cones have a bowl-shaped hole, or crater, at the top and have explosive eruptions.
tectonic plates	Pieces of the earth's crust connected together.
earthquake	Shaking of the ground caused by movements of the Earth's crust (tectonic plates)
mountains	Any natural elevation of the earth's surface. These are formed by movement of tectonic plates.
tsunami	A giant wave caused by a huge earthquake under the ocean.
land-use patterns	How the land is used for different purposes, either physical or human.

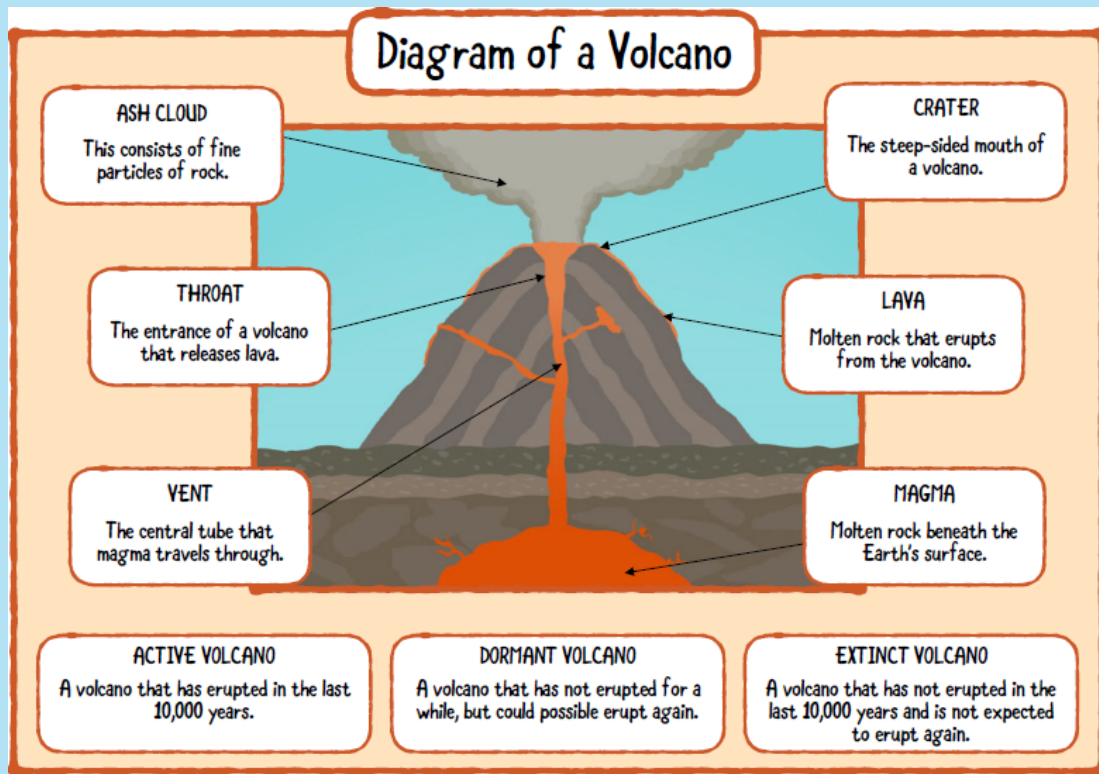
### Things you should already know:

- Be able to locate countries using maps, globes and computer mapping.
- Use ordnance survey maps to identify and use mapping symbols.
- Use keys to identify key features on ordnance survey maps.
- Know different ways in which height is depicted in maps, atlases and globes.
- Understand the differences between human geography and physical features in the landscape



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### Sticky Learning.

Can you answer any of these questions in your book?

Draw and label diagrams to show:

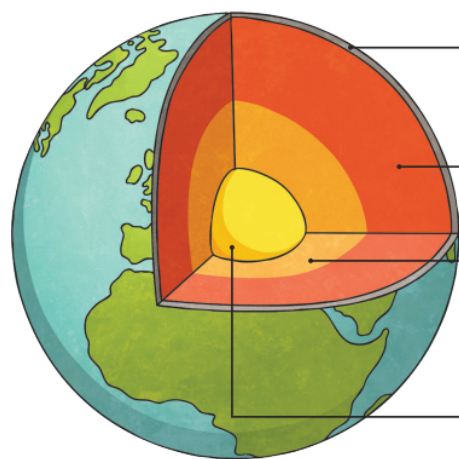
- How an earthquake could occur
- Parts of an erupting volcano
- How the types of volcanoes are different to one another
- How a tsunami might happen

Can you explain why it might be positive to live near a volcano?

What are the advantages?

What are the disadvantages or problems?

### Layers of Earth



#### **Crust**

Thin outer layer. Hard rock. 10km–90km thick.

#### **Mantle**

Extremely hot rock that flows. 3000km thick.

#### **Outer core**

Iron and nickel. Mostly liquid with some rocky parts. 4000°C.

#### **Inner core**

Iron and nickel. Hottest layer at over 5000°C.

Scan this to watch the video about volcanoes and take a volcano quiz.

