

EARTH MATTERS

MOUNTAINS

Study the physical geography of mountains and mountain ranges, their formation, some famous expeditions and also mountain biodiversity. They will create a range of artefacts including mountain models, a class world map and a freeze-frame drama that will culminate in a 'Mountain Exhibition' about famous expeditions.

EARTHQUAKES

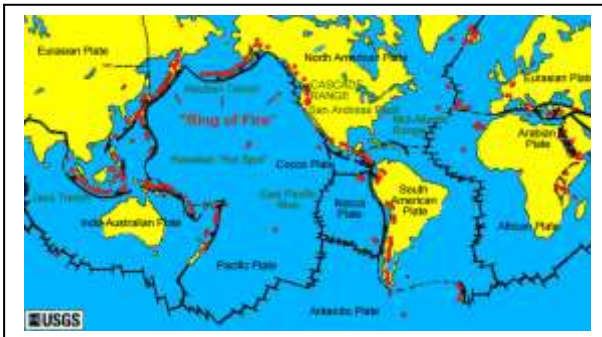
Learn about the features and key aspects of earthquakes. Find out about the movement of tectonic plates and about seismic waves. Learn about life in an earthquake zone; compile and practise a class earthquake drill; find out how buildings are built to withstand earthquakes and then design your own earthquake-proof structure.

VOLCANOES

Learn about the features of volcanoes, their formation and discover how they are distributed around the world. Along the way they create models, artwork, volcano dances, music and 'David Attenborough' style commentaries.

Geography Skills

- To describe and understand key aspects of physical geography including the geology and climates of mountain ranges, earthquakes, volcanoes
- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.



How Volcanoes are formed:

1. Magma rises through cracks or weaknesses in the Earth's crust.
2. Pressure builds up inside the Earth.
3. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption.
4. The lava from the eruption cools to form new crust.
5. Over time, after several eruptions, the rock builds up and a volcano forms.

What causes earthquakes:

An earthquake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates (plate tectonics). Earthquakes can happen along any type of plate boundary. Earthquakes occur when tension is released from inside the crust. Plates do not always move smoothly alongside each other and sometimes get stuck. When this happens pressure builds up. When this pressure is eventually released, an earthquake tends to occur.

There are five types of mountains:

- Fold - The Himalayas are fold mountains.
- Block - The Sierra Nevada mountains in California, USA are fault-block mountains.
- Dome - Bear Butte in South Dakota, USA is an example of a dome mountain.
- Volcanic – Mount Fuji in Japan is a volcanic mountain.
- Plateau - The Columbia Plateau in the Northwest USA is an example of this type of mountain.