

Year 3 UK Geography

Natural Disasters

Key Learning

Volcanoes

- Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing **magma** to sometimes **erupt** through it.
- Active volcanoes have **erupted** in the last 10 000 years.
- Dormant volcanoes haven't **erupted** in the last 10 000 years but may erupt again.
- Extinct volcanoes aren't expected to **erupt** again.



Tornadoes

- A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big **cumulonimbus clouds**.
- There can be thunder and lightning at the same time.
- You can see tornadoes due to the dust and water droplets caught in the clouds.
- Storm chasers are film-makers and scientists who head towards the storms. They film the tornadoes and collect data about them.
- Most tornadoes happen in Tornado Alley in America - more than 500 each year.
- Tornadoes can happen in the UK but only around 30 per year.



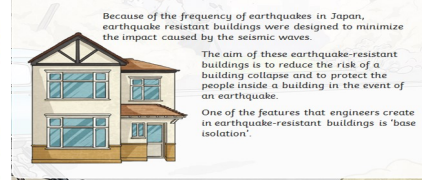
Tectonic Plates



- The Earth's surface is called the crust.
- It is made up of different rocky sections called tectonic plates.
- This map shows where the plates are.
- Tectonic plates can move about on the softer mantle underneath them.

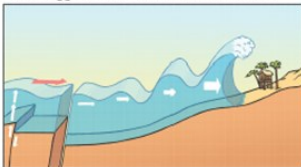
Earthquake Prevention

Earthquake Resistant Buildings



Tsunamis

- A tsunami is a giant wave caused by a huge earthquake under the ocean.
- The earthquake causes a large amount of water to be displaced very quickly causing a series of waves.
- As the waves travel through shallower water near land, they get bigger and bigger. The wave crashes onto the land causing devastation to buildings and sometimes even lives.



Earthquakes

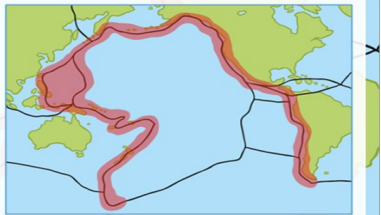
- Earthquakes are caused when the earth's **tectonic plates** suddenly move.
- Most earthquakes occur near the **tectonic plate** boundaries.
- Earthquakes can cause lots of damage to roads, buildings and property.



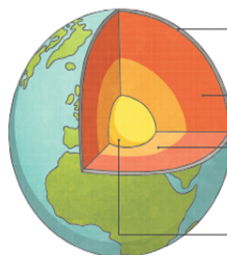
What Is the Ring of Fire?

The Ring of Fire is a horseshoe-shaped line on a map which is home to around 75% of the world's volcanoes and 90% of the world's earthquakes.

The area is a 25 000 mile line of volcanoes, tremors and earthquakes around the edge of the Pacific Ocean.



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.

What is it like to live near a volcano? Pros of living near a volcano include amazing scenery, rich fertile soils and cheaper land and homes, whereas the cons include the dangers of living near a volcano including the destruction of homes, risks of earthquakes, lava flows, fires, tsunamis, mud and pyroclastic flows and the risk of death.

Key Vocabulary

eruption	When gas and or lava are released from a volcano, sometimes explosively.
aftershock	A smaller earthquake which comes after a large earthquake (called the main shock) in the same area.
tsunami	A long, high sea wave caused by an earthquake or other disturbance.
magma	Molten rock that is underground.
lava	Molten rock that breaks through the Earth's surface.
dormant	A volcano which is not erupting now but is still considered active because it could erupt in the future.
fault	A fracture or zone of fractures between two blocks of rock.
magnitude	The size or extent of something.
landslide	The movement of a mass of rock, debris or earth down a slope.
Tectonic plates	Gigantic pieces of the Earth's crust and uppermost mantle.
earthquake	What happens when two blocks of the earth suddenly slip past one another.
volcano	A mountain or hill having a crater or vent through which lava, rock fragments, hot vapour and gas have been erupted from the Earth's crust.