

Extreme Earth

Year 3

Volcano – A vent in the surface of the Earth through which magma and ash erupt. Also, the structure that is left which is created by the cooling magma and lava.

Magma – Molten rock beneath the surface of the earth.

Lava – Magma which has reached the surface through a volcanic eruption. Streams of liquid rock that flow from a crater

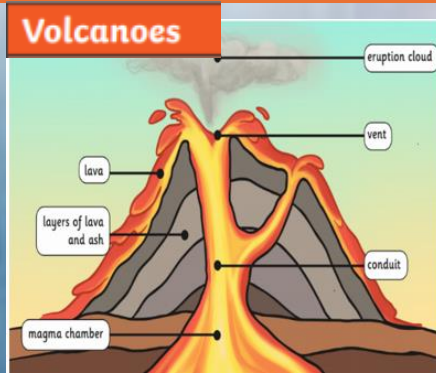
Crater – A steep-sided usually circular depression formed by either an explosion or collapse of at a volcanic vent.

Earth's crust - The outer most layer of the Earth

Eruption - When hot rocks and lava burst from a volcano.

Extinct - A volcano which has not erupted in 10,000 years

Dormant - A volcano which is presently inactive but which may erupt again.



Volcanoes

There are over **1500** active volcanoes in the world.

The word volcano comes from the name Vulcan, the Roman god of fire.

Where are the world's most famous volcanoes?

Mount Vesuvius, near Naples, Italy

Krakatoa, Indonesia

Mount St. Helens, Washington, USA

Interesting facts:

- Volcanic eruptions can send ash high into the air, over 30km (17 miles) above the Earth's surface.
- Pumice is a unique volcanic rock (igneous) that can float in water

How are volcanoes formed?

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

Earthquakes

How are earthquakes caused?

- Tectonic plates collide, move apart or slide past each other causing friction.
- This causes an earthquake which is a sudden violent shaking of the ground, typically causing great destruction.

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Key vocabulary

Convergent- where two plates are colliding

Divergent- where two plates are moving apart.

Transform- where plates slide passed each other.

Plate boundary- A plate boundary is a location where two tectonic plates meet.

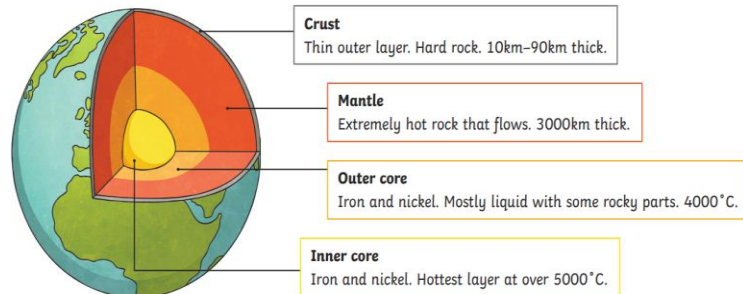
Tectonic plates- one of the sections of the earth's lithosphere

Core- the dense central region of a planet, especially the nickel-iron inner part of the earth

Continents- any of the world's main parts of land

Subduction- the sideways and downward movement of the edge of a plate of the earth's crust into the mantle beneath another plate.

Layers of Earth



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.

