

Key vocabulary

earthquake a sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the Earth's crust.

tectonic plate a giant slab of land floating over the Earth's mantle.

plate boundaries the place at which two or more tectonic plates meet.

eruption the ejection of molten rock, steam and other material, as from a volcano or geyser.

crust the outermost shell of our planet, made up of continental and oceanic crust.

mantle a layer of silicate rock between the crust and the outer core.

core part of Earth in the middle of our planet. It has a solid inner core and a liquid outer core.

convergent a tectonic boundary where two plates are moving toward each other.

divergent a tectonic boundary where two plates are moving away from each other and new crust is forming from magma that rises to the Earth's surface between the two plates.

volcanic mountain a usually cone-shaped mountain formed by the lava that flowed or were thrown out from an opening in the Earth's crust during an eruption.

magma hot fluid material below or within the Earth's crust from which lava and other igneous rock is formed on cooling.

Dangerous Earth

Geography Y6: Dangerous Earth

Links to prior learning:
Imaginary lines on Earth's surface (Y5)

Links to other subjects:
English – extended writing

Key Knowledge

Plate tectonics The earth's crust is broken into plates. Heat rising and falling inside the mantle creates **convection currents** which move the plates. The movement of the plates, and the activity inside the Earth, is called the theory of plate tectonics.

Earthquakes These 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. The point inside the crust where the pressure is released is called the **focus**. The point on the Earth's surface above the focus is called the **epicentre**. Earthquake energy is released in **seismic waves**. These waves spread out from the focus. The waves are felt most strongly at the epicentre, becoming less strong as they travel further away.

Volcanoes 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.

