

Links to prior learning
– names of continents
and oceans in Yr2,
map work

Year 4 – Volcanoes and Earthquakes

Links to other subjects
– Reading non-fiction

Subject Specific 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
crust	The outermost shell of the plant
core	The middle of the planet with a solid inner core and a liquid outer core
convergent	A tectonic boundary where two plates are moving towards each other
divergent	A tectonic boundary where two plates are moving away from each other
volcanic mountain	Most commonly, a cone shaped mountain
magma	Hot fluid material below or within the Earth's crust from which lava and other igneous rock is formed on cooling.
Physical features	characteristics of the land that occur naturally, such as valleys, mountains, cliffs

Key concepts, facts and sticky 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.

By the end of this period of learning, the children should be able to use geographical language to describe volcanoes and earthquakes; explain how volcanoes and earthquakes are formed and describe the effect they have on the surrounding landscape.

