

## What I have learnt already

1	Finding places	I can name the continents of the world and locate them on a map. (Year 2) I can use maps to find countries and cities. (Year 3)
2	Rocks and soil	I can compare different types of rocks and explain how soil is made. (Year 3)

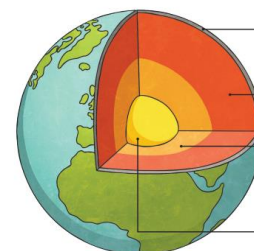
## Facts I need to learn now

1	Under our feet	Underneath our feet, the Earth is made of layers of soil, bedrock, crust, magma, mantle, outer core and inner core. The crust is made up of moving tectonic plates.
2	How volcanoes are formed	Tectonic plate boundaries can allow magma to burst through the Earth's crust. Sometimes hotspots form under the crust and break through. Volcanoes can form on land and under water.
3	How volcanoes affect people's lives	There are benefits to living by volcanoes, such as mineral-rich soils, geothermal energy and tourism. There are dangers too, for example, lava destroys crops, homes and buildings.
4	What causes earthquakes and how they are measured	Tectonic plates move: some slide against each other, some push towards each other and some move away from each other. This movement makes the earth shake. Some earthquakes are caused by magma activity below volcanoes.
5	What causes tsunamis and how they affect people	Earthquakes and volcanoes can cause large areas of land to move and when that land causes water in nearby seas and oceans to move it travels in a wave until it reaches land on the other side. Tsunamis can destroy buildings with the force of water, but also bring pollution and dangerous debris.
6	What causes tornadoes and how they affect people	A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big clouds. There can be thunder and lightning at the same time.

## What I will learn next

1	Physical features	I will be able to locate mountain ranges in the UK and around the world using different sources. (Year 5)
2	Physical features	I will describe key features of mountain ranges and explain the different ways in which mountains can form. (Year 5)

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.

## Vocabulary (Words I need to know)

1	Tectonic plates	Large areas of the earth's crust that join together but are continually moving.
2	Seismic activity	Vibrations caused by movement at the tectonic plate boundaries, especially before or after a major earthquake
3	Eruption	Lava, ash and gases are forced at extreme speeds out of the earth's crust.
4	Magma	Molten hot liquid or semi-liquid rock below the crust. When it reaches the surface it becomes lava.
5	Benefit	The positive effects or advantages that an event has for people.
6	Risk	Dangers that might or might not happen that people make choices about.
7	Volcano	A vent in the Earth's surface from which lava and gases pour out.
8	Tsunami	An earthquake that occurs at the bottom of the sea that can push water upwards and create massive waves.
9	Tornado	A moving rotating wind that has a funnel shape and is part of a larger storm.

