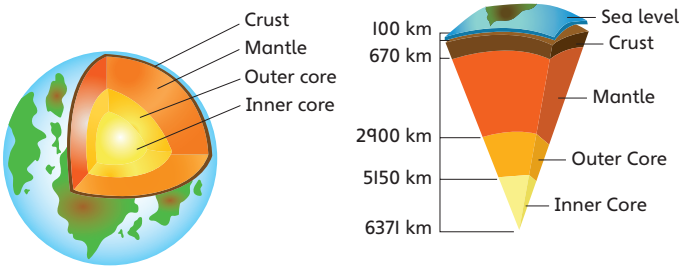
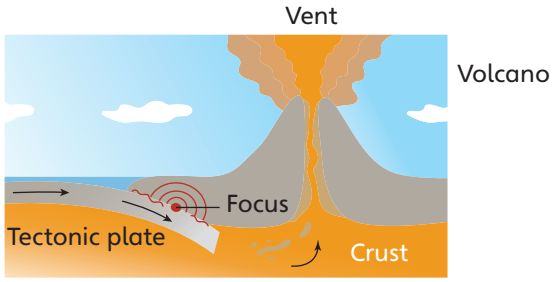
Knowledge organiser



Layers of the Earth



Earthquakes occur when plates jolt forward after getting stuck

Volcanoes erupt when magma rises to the surface

A shield volcano

A stratovolcano

Structure of the Earth	
Crust	Solid rock, 0–70 km thick; continental (granite) and oceanic (basalt); made up of tectonic plates
Mantle	Solid rock, approx. 2,900 km thick
Outer core	Liquid metal: iron and nickel; approx. 4,500 °C
Inner core	Solid metal: iron and nickel; approx. 6,000 °C

Rocks and metals	
Granite	A type of rock formed by cooled magma; granite is the most common rock on the continental crust
Basalt	A type of rock formed by cooled magma; basalt is the most common rock on the oceanic crust
Iron	A type of metal; iron is the most common metal on Earth
Nickel	A type of metal

Vocabulary	
Epicentre	The point on the Earth's surface directly above the focus. An earthquake is felt most strongly at the epicentre.
Focus	The point deep underground where an earthquake starts
Fold mountain	A mountain created when tectonic plates collide and cause the plates to wrinkle upwards
Friction	A force between two things that are trying to move past each other
Lava	Magma that has reached the Earth's surface
Magma	Molten (melted) rock beneath the Earth's surface
Moment magnitude scale	A scale from 1–10 to measure the strength of earthquakes
Pressure	A physical force created when solid things push against each other, or when gasses build up inside something and push against the sides
Seismic waves	Waves of energy created by an earthquake that travel through the Earth
Tectonic plates	Large sections, or plates, that make up the surface of the Earth

Volcanoes	
Shield volcano	Largest volcanoes on Earth; wide base, low height Example: Kilauea (Hawaii) and Erta Ale (Ethiopia)
Stratovolcano	Most of the world's volcanoes are stratovolcanoes; high with steep sides Example: Mount Vesuvius (Italy) and Barðarbunga (Iceland)
Active volcano	A volcano that has erupted at least once in the last 10,000 years and still shows some signs of activity, such as movement of the plate beneath it, or gasses being released into the air
Dormant volcano	A volcano that has erupted in the last 10,000 years but is not showing signs of activity; however, it is expected to erupt again at some point
Extinct volcano	A volcano that has not erupted in the last 10,000 years and shows no signs of activity