

The layers of the Earth

The structure of the Earth

The Earth is made up of four layers:

- the crust
- the mantle
- the outer core
- the inner core

The centre of the Earth is around 6400 km below the surface.



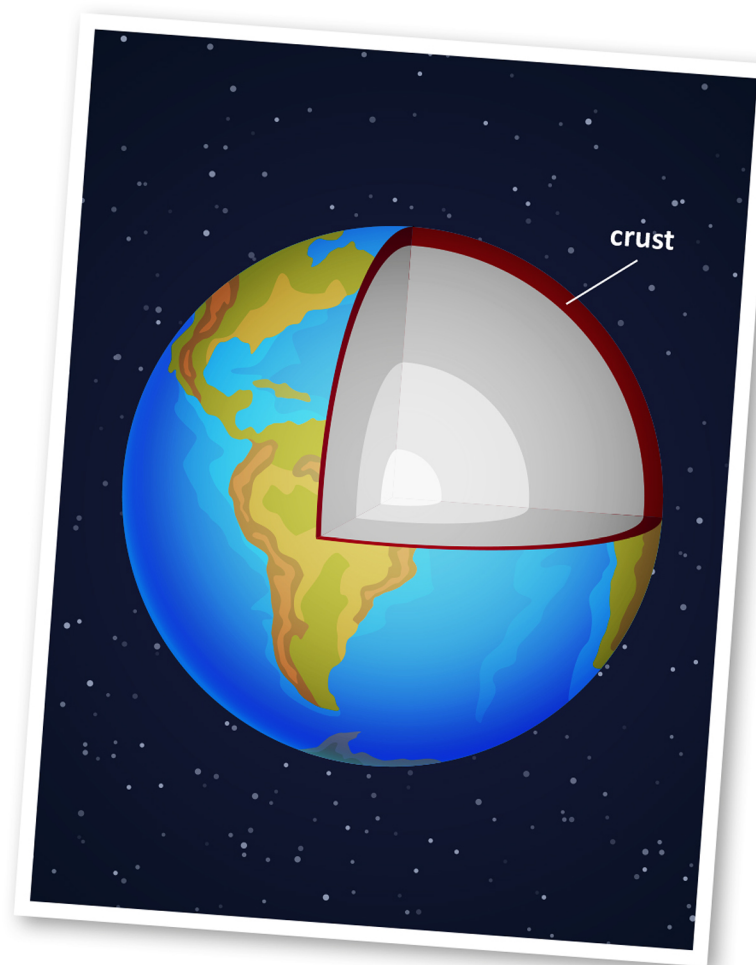
The crust

The crust is the solid, outer layer of rock on which we live.

The Earth has two types of crust: continental and oceanic.

The continental crust is 25–70 km thick and carries land. The oceanic crust is 7–10 km thick and carries water.

The crust is made up of many slow-moving pieces called tectonic plates.

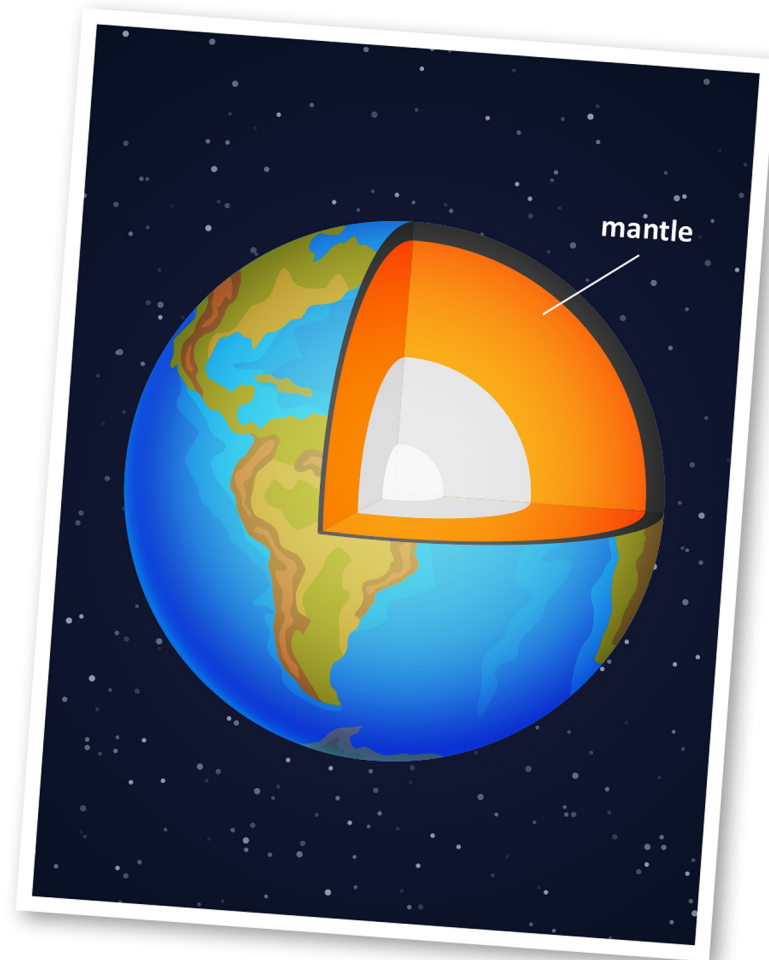


The mantle

The mantle is the second layer of the Earth. It is around 3000 km thick.

The mantle is much hotter than the crust. It is made of semi-molten rock called magma. The rock is hard in the upper part of the mantle, but lower down, the rock is soft.

Sometimes, magma forces its way to the surface of the Earth and escapes as lava.



The outer core

The outer core is a liquid layer around 2000 km thick. It is mostly made up of iron and nickel.

Swirling liquid iron in the outer core generates a magnetic field around the Earth.

In the outer core, the temperature is about 3500–4000°C.



The inner core

The inner core is also made up of iron and nickel. Because it is so deep in the Earth, the inner core is under huge pressure.

In fact, the pressure is so great that the inner core remains solid, even though it is very hot.

At around 5500°C, the inner core is the hottest part of the Earth.

