# Layers of the Earth

Earth is made up of four layers called the crust, mantle, outer core and inner core.

## Crust

The crust is the outer layer of Earth. It is the solid rock layer upon which we live and is between 7–70km thick. The crust is broken into large pieces called tectonic plates. Earth has two types of crust.

#### **Continental crust**

The continental crust is found under continents and land masses. It is mostly composed of different types of granite.

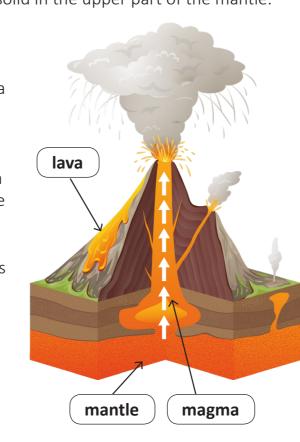
#### **Oceanic crust**

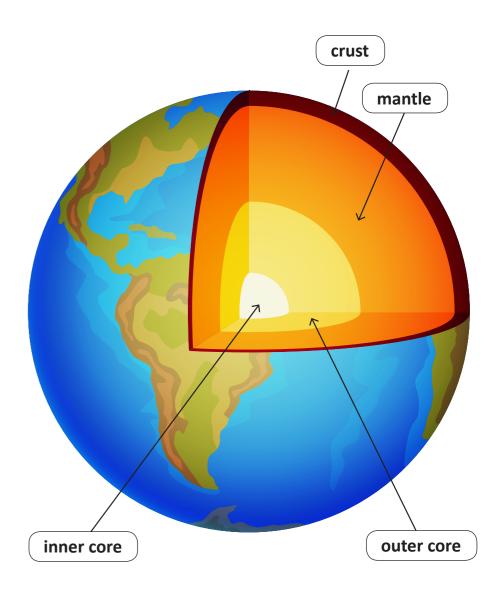
The oceanic crust is found underneath oceans and seas. It is much thinner than the continental crust.

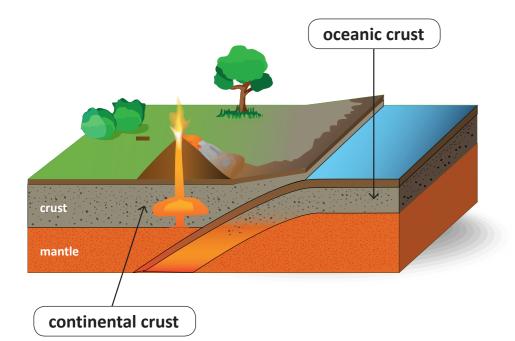
## Mantle

The mantle is made of a semi-molten rock called magma. The rock is mostly solid in the upper part of the mantle.

Lower down. the rock is soft and moves very slowly. Sometimes, magma forces its way through cracks in the Earth's surface and escapes as lava from a volcano. The mantle is hotter than the crust. The temperature ranges from about 1000°C to 3700°C. The mantle is around 3000km thick.







### **Outer core**

The outer core lies between Earth's solid inner core and its mantle. It is a molten metal layer that is about 2400km thick. It is composed of mostly iron and nickel and its temperature ranges from 4000°C in the outer regions to 6000°C towards the inner core.

#### Inner core

At the centre of Earth is the solid inner core. It is the hottest part of Earth at about 6000°C and contains large amounts of iron and nickel. It is about 1220km from the edge of the inner core to the centre of Earth.

# Glossary

lava

magma

molten

semi-molten

solid



- Molten rock that comes out of a volcano during an eruption.
- Molten and semi-molten rock found under the Earth's surface.
- Metal or rock that is in a liquid state because of great heat.
- Metal or rock that is in a state between a solid and a liquid.
- A substance that keeps its shape and is not a liquid or gas.
- tectonic plate One of the pieces of the Earth's crust that floats on the mantle.

