



Under Our Feet



Aim

- Describe and understand key aspects of physical geography in the context of what is under the surface of the Earth.

Success Criteria

- I can recognise that there is rock under all surfaces.
- I can list the layers that make up the Earth.
- I can compare the Earth's structure to a familiar object.

What would you find?



Imagine you are digging this hole.



What is at the bottom of the hole?

What different things might you find as you are digging?

Where would you end up?



Welcome on board the Underground Explorer!

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Layers of Soil

Humus

The very top layer of soil, made up of dead and rotting leaves and animals.

Topsoil

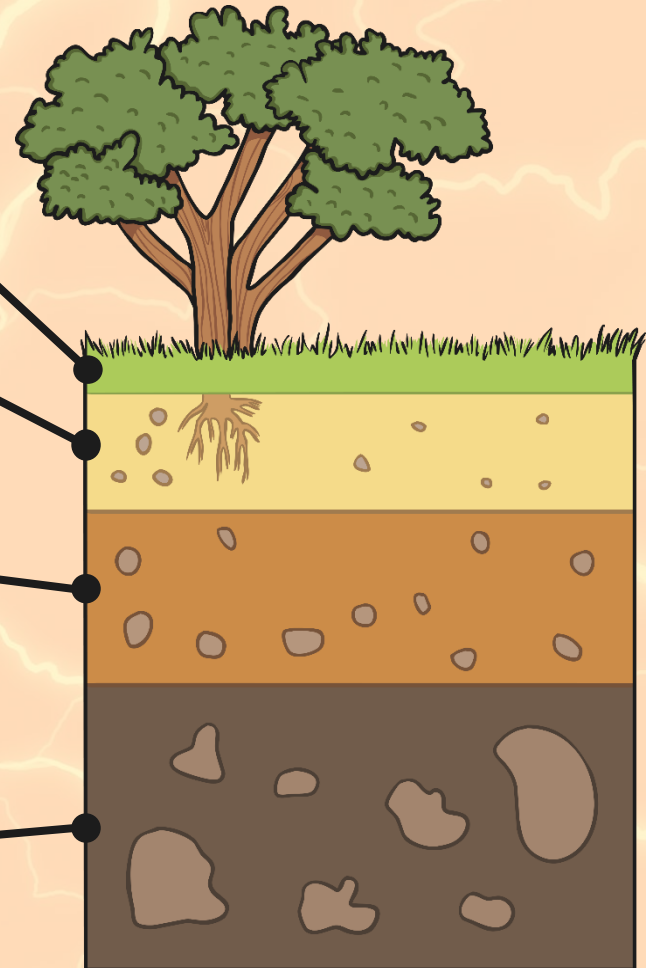
Where plants grow their roots.
Very few rocks.

Subsoil

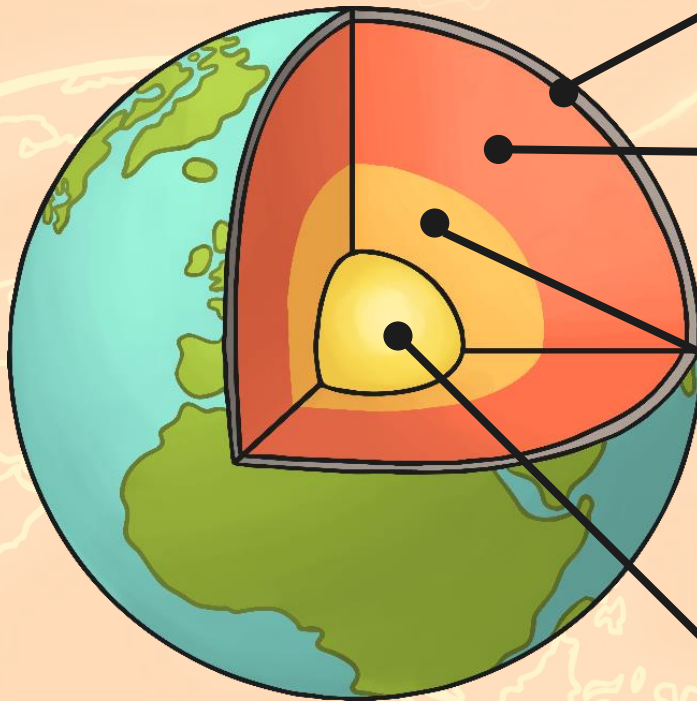
More rocks and stones in clay. This soil is full of nutrients. Tree roots may reach into this soil. You might find fossils here.

Bedrock

A mass of rock such as granite, basalt, quartzite, limestone or sandstone. You might find fossils here.



Layers of the Earth



The **crust** is the thin outer layer of cold hard rock that covers the world (10km-90km thick).

The **mantle** (extremely hot rock that often flows like treacle) is 3,000 km thick.

The **outer core** is mostly made of iron with some nickel. It is over 4000°C. It is mostly liquid with some rocky parts. Because the outer core moves around the inner core, Earth's magnetism is created.

The **inner core**, which is made of iron and nickel, is the hottest layer at over 5000°C. It melts the metals in the outer core to form magma.

What is under your feet?



Use the equipment on your table to show the different layers that make up Earth.



Try to think about the size of each different layer! The crust is thin but the mantle is very thick.

What's that like?



Watch this video comparing the Earth's structure to a peach

How is the comparison accurate?

How is the structure of the Earth different to that of a peach?



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