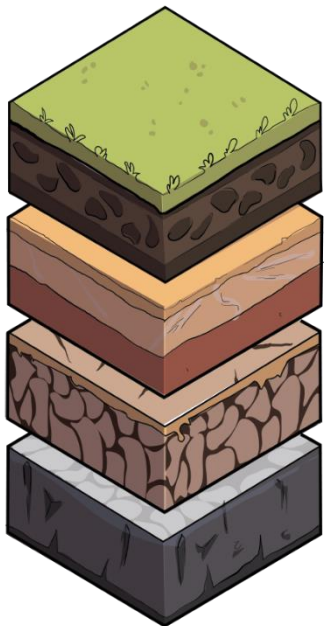# Rocks and Soils

Rocks

If you dig down anywhere on Earth you will find rock. Rocks can be hard, soft, permeable or impermeable, depending on what type of rock it is. Slate, marble, chalk and granite are all different types of rock and all have different uses.

marble	granite	sandstone	basalt	slate	clay	chalk	pumice	limestone

Soils

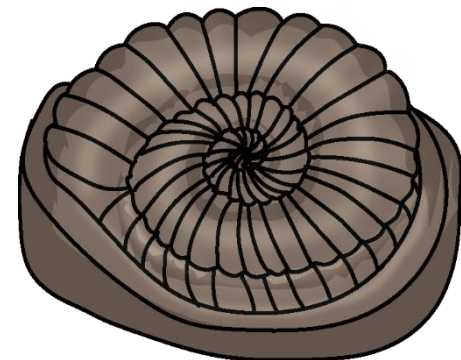**Top soil** which is full of nutrients and contains rotting plants and organisms.

Subsoil which is tightly packed soil, lighter in colour to the top soil as it contains fewer nutrients.

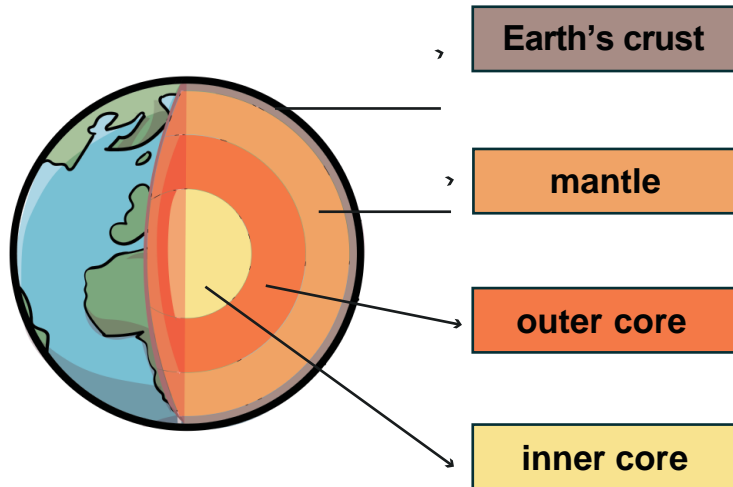**Rocky soil** which is rocks that are breaking down in to soil.

Bedrock which is just rock.

Fossils

A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.

Under our feet

Earth's crust

mantle

outer core

inner core

Key Vocabulary

crust - the outer layer of the Earth

decay - to rot or decompose

fossil - the preserved remains of a dead organism

geologist - a person who studies rocks

igneous rock - rock formed from cooled magma

impermeable - doesn't allow liquid to pass through

inner core - the very centre of the Earth

mantle - the part of the Earth between the crust and the core

metamorphic rock - rock formed from changes of heat or pressure

microbe - a small living thing

mine - to dig into the Earth for rocks and minerals

permeable - allows liquid to pass through

rock - any naturally occurring solid mineral material

sedimentary rock - rock formed by layers of sediment

soil - made up of pieces of rock, minerals, decaying plant material, microbes and water

Types of rock

Igneous rock - When a volcano is about to erupt, magma comes to the surface. As it flows down the volcano and across the land, it cools and turns back into a solid. This forms rock.

Sedimentary rock - When a river reaches the sea, pieces of broken rock settle at the bottom of the sea to form a layer of sediment. Over millions of years, more and more layers of sediment settle on top and squash it down until it turns into rock.

Metamorphic rock - Metamorphic rock is formed from other rocks that are changed because of heat or pressure.