Aston on Trent Primary School
Science Knowledge Organiser

Curriculum overview

We will explore different types of rocks and soils and investigate their properties. We will also learn to identify and compare igneous, sedimentary and metamorphic rocks and learn how each type is formed.

Key vocabulary

Igneous rock	Rock made when melted rock cools and becomes solid.
sedimentary	Rock formed when layers of tiny pieces of rock, sand or other material build up and become pressed together over a long time.
metamorphic	Rock that has been changed by heat and pressure deep inside the Earth.
magma	Hot, melted rock found beneath the Earth's surface.
lava	Hot, melted rock that has come out onto the Earth's surface from a volcano.
permeable	Allows water to pass through it.
impermeable	Does not allow water to pass through it easily.

Our topic is...



'Rocks and soils'

Sticky knowledge

There are three types of naturally occurring rock: igneous, sedimentary, metamorphic.

Rocks have different properties, which make them useful for different purposes.

Igneous rocks form when melted rock cools and hardens.

Sedimentary rocks form in layers and may contain fossils.

Metamorphic rocks form when existing rocks are changed by heat and pressure.

Molten rock that remains underground.

Properties of rocks

If a rock is **permeable,** for example pumice, it means it can **allow water** to pass through it. A little bit like a sponge. Water can be soaked up by a sponge. A rock which is **impermeable does not allow** water to be passed through.





Soils

Soil is the uppermost layer of the Earth. It is a mixture of:

- minerals
- air
- water
- organic matter (including living and dead plants and animals).

