

# Science UKS2 Knowledge Organiser

## Key Knowledge

Cast and Mold fossils are formed when an animal's skeleton decomposes under the earth. Minerals enter the space under the earth where the skeleton once was and when they solidify they create a cast of the skeleton.

Soil is the top layer of the Earth's crust, made up of organic matter, minerals, and organisms that support life.

Rocks can be grouped according to a variety of properties including: durability, permeability and density.

Crystals are a special kind of solid material where the molecules fit together in a repeating pattern. This pattern causes the material to form all sorts of unique shapes. The process of crystal forming is called crystallization. Crystals often form in nature when liquids cool and start to harden. Certain molecules in the liquid gather together as they attempt to become stable. They do this in a uniform and repeating pattern that forms the crystal.

There are 3 different types of rock: sedimentary, metamorphic and igneous.

## Main Learning: Rocks

### Vocabulary

#### Petrologist

Someone who studies how rocks are formed and how they are used (a discipline related to geology)

#### Igneous

Rocks formed by the cooling and hardening of molten lava or magma.

#### Sedimentary

Rocks formed by sediment that is deposited over time.

#### Metamorphic

A rock formed from preexisting rock that's changed through heat and pressure.

#### Permeable

Allows water to pass through.

#### Impermeable

Does not allow water to pass through



## Prior Learning

### Sedimentary



Formed under the sea as a result of sedimentation,



compaction and cementation.



### Igneous



Formed from magma or lava.



### Metamorphic



Metamorphic rocks are igneous or sedimentary or rocks that change chemically due to proximity to magma, huge pressure from burial or changes in tectonic plates.

