

Science Knowledge Organiser

Year 3 Autumn (i)

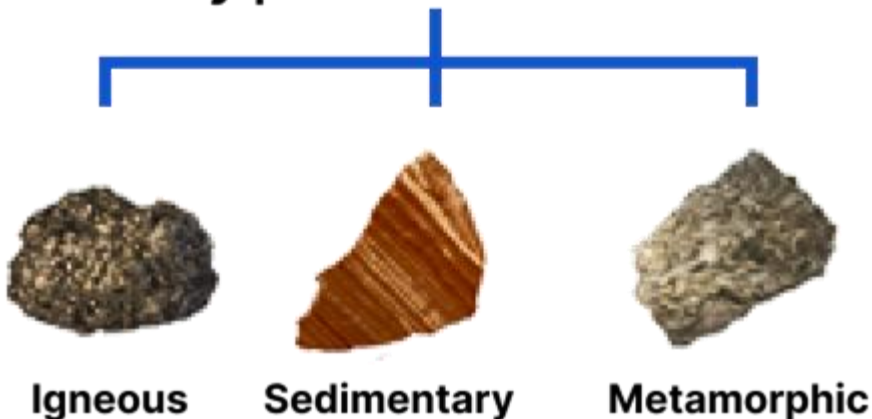
What types of rock can we find out about?

Substantive Knowledge- what will we learn?

Pre-teach opportunity- can you do this?

What physical differences can you spot for the different types of rock?

Types of Rocks



Sedimentary rock is formed in layers by the building up of mineral or organic particles and can crumble easily.

Igneous rock is formed when magma cools and sets. It is very hard because the crystals are interlocked.

There are three main types of rocks: igneous, sedimentary, and metamorphic.

Igneous rocks are formed from solidified magma or lava.

Sedimentary rocks are formed from layers of sediment that have been compressed over time.

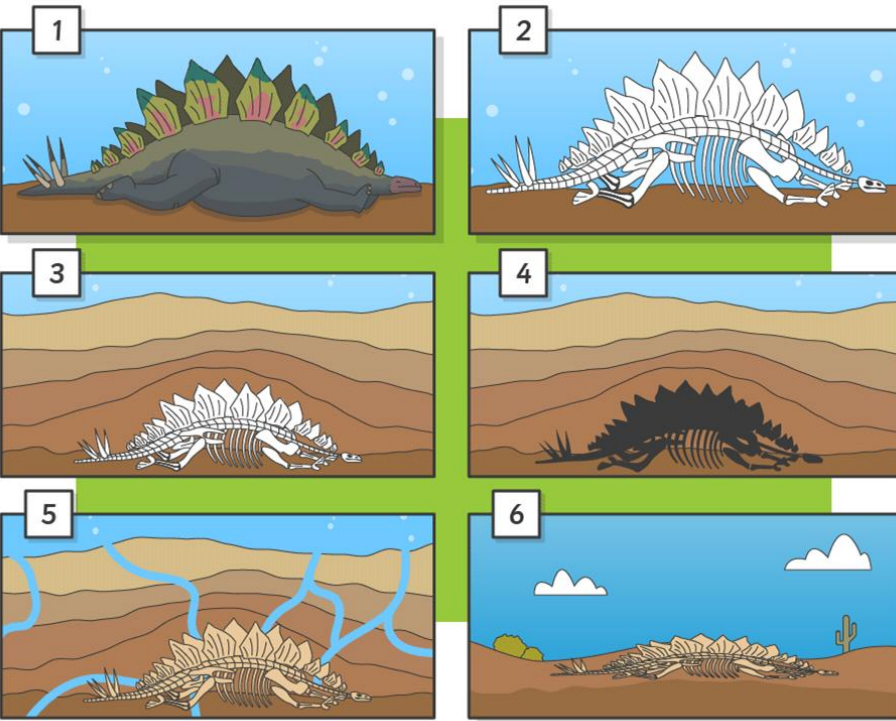
Metamorphic rocks are formed when existing rocks are exposed to heat and pressure, causing them to change form.

The rock cycle describes the process by which rocks are created, broken down, and reformed over time.



The rock cycle

How fossils are formed

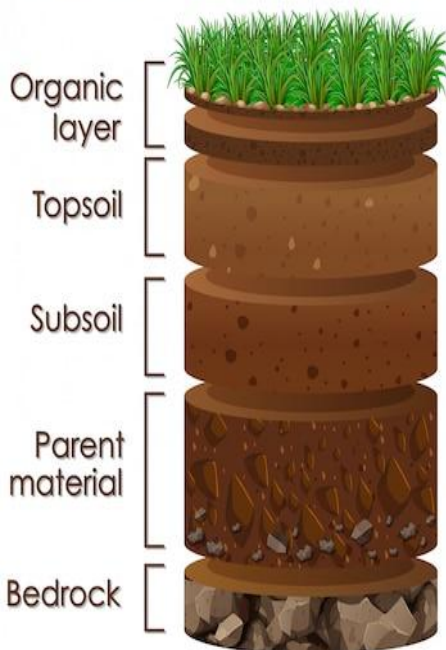


1. An animal dies, its skeleton settles on the sea floor and is buried by sediment.
2. The sediment surrounding the skeleton thickens and begins to turn to stone.
3. The skeleton dissolves and a mould is formed.
4. Minerals crystallise inside the mould and a cast is formed.
5. The fossil is found by paleontologists.

Fossils are formed in sedimentary rocks.

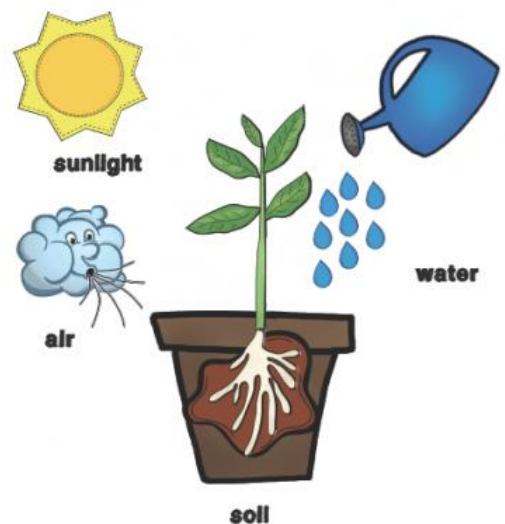
All plants need space, the right temperature, light, water, air and nutrients to grow.

Soil Layers on Earth



Soil is made up of many layers. Depending on the features of the layer, the soil will have different purposes. It is made up mainly of mineral particles, organic materials, air, water and living organisms

Plant Needs



Core Vocabulary

Sediment – Very small pieces of solid material that settle at the bottom of liquid.

Organic – From living matter.

Minerals – Naturally occurring inorganic substance.

Crystallise – To form crystals.

Expose – To uncover something.