

Knowledge Organiser - Rocks

KEY VOCABULARY AND SPELLINGS

Rock – made up of grains that are packed together

Mineral – solid chemical substances that occur naturally

Fossil – the remains or impressions of a prehistoric plant or animal embedded in rock

Igneous – lava or magma that has turned from liquid to solid (forming a rock)

Metamorphic – an igneous or sedimentary rock that has been changed by extreme heat or pressure

Sedimentary – a rock formed from the build-up of sediment at the bottom of rivers or oceans

Sediment – dead animals, plants or pieces of rock that settles to the bottom of a liquid

Magma – liquid rock inside a volcano

Lava – liquid rock which flows out of a volcano (ranges from 700 to 1200 degrees centigrade)

Types of rocks

Igneous rocks - are very hard, dark and heavy. They are formed when molten magma from a volcano cools down. They tend to have interlocking grains giving the rock a crystalline appearance. **EXAMPLES: granite, basalt, obsidian**

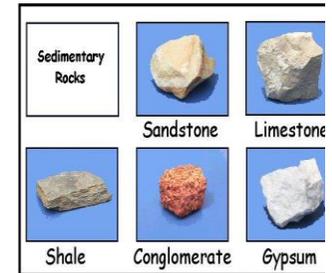
Examples of Igneous Rocks



Metamorphic rocks - are rocks which have been changed over time by pressure or heat. Fossils can be found in metamorphic rocks if plants and animals have been trapped in the rocks. They are hard but can be damaged by acids. **EXAMPLES: slate, marble**

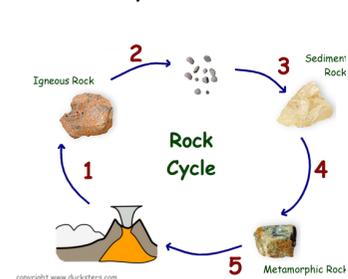


Sedimentary rocks – are formed by sediment (which includes minerals, small pieces of plants and other organic matter) that is deposited over time. The sediment is compressed over a long period of time before it becomes solid layers of rock.



EXAMPLES: sandstone, limestone, flint, chalk

The rock cycle



FOSSILS - When an animal or plant dies, it usually decays quickly or can be eaten. However, sometimes an animal's body sinks into thick mud where there is oxygen so the remains don't decay or aren't disturbed. The remains rest here for thousands/millions of years with more mud and pressure on them. Minerals in the mud turn the remains to stone.



Soil - Half of soil is air and water. In soil you can find sand, small stones, bits of leaves and roots. There are also millions of micro-organisms in the soil which help break down the matter and make the soil healthy and full of life.

