



# Year 3 Science - Rocks (Chemistry)

Knowledge and skills  
Empower  
You to  
Succeed

Cronton CE Primary School

Keys to  
Success

Spring 1



Vocabulary



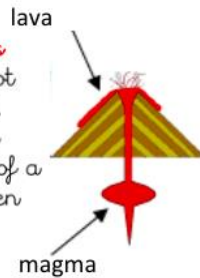
Knowledge

There are 3 different types of rocks.

### Igneous Rock

**Igneous rocks are formed by Volcanoes**

Far underground, the temperature is so hot that rock melts into a liquid (molten rock). When the liquid rock is underground it is called magma and when it is spilled out of a volcano it is called lava. When this molten rock cools it forms igneous rocks. Most igneous rock is very hard e.g. granite.



granite



pumice

### Sedimentary Rocks

Formed over millions of years when sediments (tiny pieces of rock and animal skeletons) are pressed together at the bottom of seas and rivers. E.g. Sandstone, coal, limestone (chalk) Some sedimentary rocks contain fossils.



sandstone



limestone

### Metamorphic Rocks

These are formed when igneous or sedimentary rocks are changed due to heat or pressure. e.g. Slate and marble.



Slate



Marble

Rocks can contain grains, crystals, layers and fossils



Fossils were formed millions of years ago.

- When plants and animals died, they fell to the seabed.
- They became covered and squashed by other material.
- Over time the dissolving animal and plant matter is replaced by minerals from the water - **bone to stone.**



Fossils are only found in sedimentary rock.

**Permeable** - Allow water to pass through e.g. Pumice

**Impermeable** - Do not let water pass through e.g. marble

**Hard/soft rocks** - some rocks need to be cut with tools because they are so hard e.g. granite. Others are soft and can be moulded e.g. clay

**Durable** - rocks which are resistant to erosion last longer and are more durable.

**Density** - if the particles are tightly packed it has a high density, these rocks would sink in water.

**Pebble/boulder** - small and large piece of rock.