

Knowledge Organiser – Rocks (Science Year 3)

Key Vocabulary	Definition
Rock	Natural substance, made up of one or more minerals.
Fossil	Trace or remains of an ancient living thing.
Igneous rock	Formed by the cooling and solidifying of molten materials.
Metamorphic rock	Rock that was once one form of rock but has changed to another under the influence of heat and pressure.
Sedimentary rock	Formed through the depositing and solidifying of sediment.
Peat	Formed when plant material does not fully break down in acidic conditions, with no air.

There are 3 main types of rock:

**Sedimentary
rock**



Limestone



**Igneous
rock**

Pumice



Granite



Obsidian

**Metamorphic
rock**

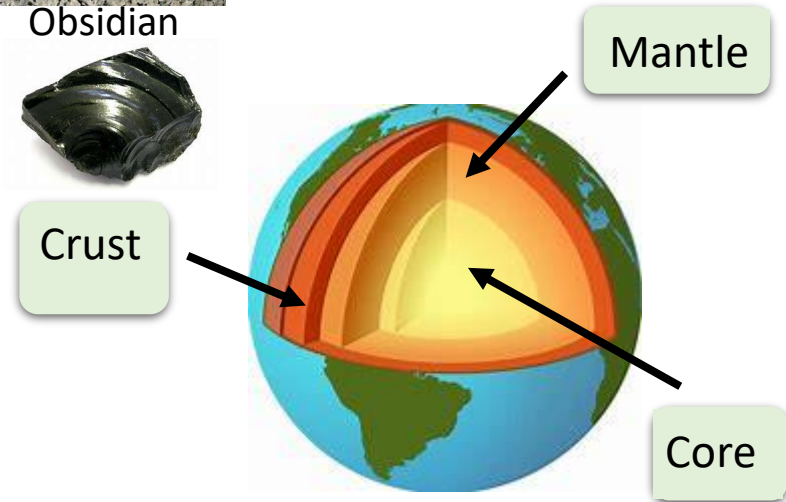
Marble



Slate



The Earth has 3 layers!



Minerals are made of elements.

Elements are simple substances that cannot be broken down into any other substance.

When a rock lets water through, the rock is said to be **permeable**.

When a rock doesn't let water through it, the rock is said to be **impermeable**.



Sand



Silt

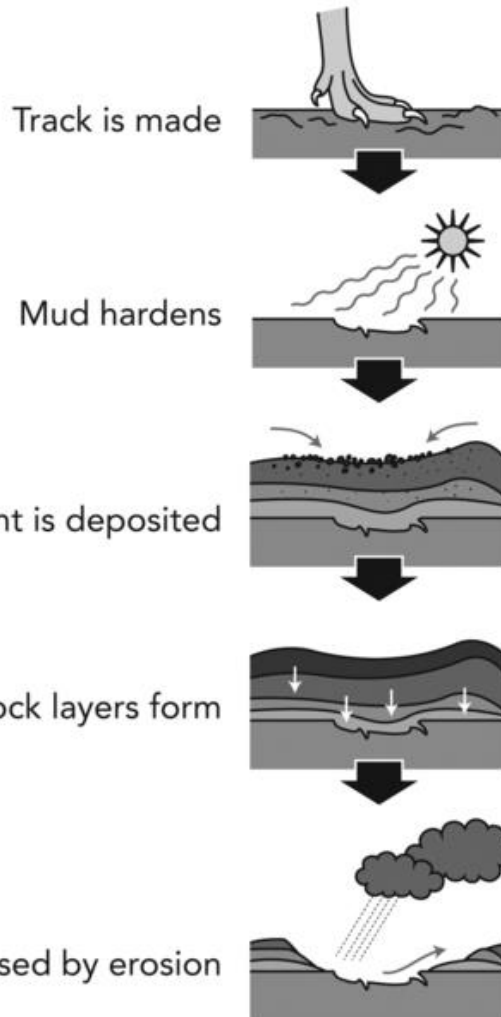


Clay

There are three main types of soil:

Loam soils are composed of a mixture of clay, sand and silt.

Fossil formation



	Sedimentary	Igneous	Metamorphic
Hardness	The softest rock type.	Hardest type of rock.	Harder than sedimentary rocks.
Permeability/ Layers	Has layers and is permeable.	No layers/gaps (impermeable).	Has thin layers.
Do they contain fossils?	Fossils trapped in them.	No fossils because they would melt in the hot magma.	Fossils are usually squashed out of shape.
Appearance	Small grains of tiny rock particles and bits of dead animals and plants.	Interlocking crystals that fit very tightly together, making the rock very hard.	Interlocking crystals arranged in layers.
Structure	