

Knowledge Organiser

Science – Rocks

Key Learning

- Rock is a naturally occurring material.
- There are different types of rock which have different properties. They have different sizes of grain or crystal. They may absorb water.
- Rocks can be different shapes and sizes.
- Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter).
- The type of rock, size of rock pieces and the amount of organic matter affect the property of the soil.
- Some rock contain 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.

Key Vocabulary



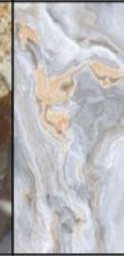

Rock	A solid mass made up of minerals. Rock forms much of the earth's outer layer, including cliffs and mountains
Stone	Hard solid non metallic mineral mater of which rock is made
Pebble	A small stone made smooth and round by the action of water or sand .
Boulder	Large rock typically one that has been worn smooth by erosion.
Grain	A grain of something such as sand or salt is a tiny hard piece of it.
Crystals	Special kind of solid materials where the molecules fit together in a repeating pattern.
Hard	Solid and firm to the touch.
Soft	Not firm or hard to the touch.
Texture	The feel, appearance or consistency of a surface or a substance.
Fossil	The preserved remains, or traces of remains, of ancient organisms
Layers	Pieces on top of each other
Soil	A mixture of minerals and organic material that covers much of Earth's surface.




Diagrams

What is soil made from?



AIR – Oxygen, carbon dioxide, nitrogen
ORGANIC MATTER – Living and dead plants and animals.
WATER – Air and water fill the gaps between particles of soil.
MINERALS – Broken down rock.

chalk	flint	marble	limestone	sandstone	granite
					

Igneous Rock	Metamorphic Rock	Sedimentary Rock
		
Far underground the temperature is so hot, rock melts into a liquid (molten rock). When the liquid is underground, it is called magma and it can cool to form igneous rock.	Metamorphic rocks are formed under the surface of the earth from the change (metamorphosis) that occurs under the intense heat and pressure (squeezing).	These rocks form under the sea. Rocks are broken into small pieces by wind and water (erosion). They settle as mud, sand, minerals and even remains of living things. Over time layers build up and the pressure turns this sediment into rock.

