



Science Knowledge Organiser - Year 3 Rocks and Soils

KEY VOCABULARY

humus	The remains of plants and animals that have died and been broken down by bacteria and fungi in the soil.	Some soils contain lots of clay and smaller amounts of humus and sand.
weathering	The breakdown of rock into smaller pieces by physical and chemical processes at the Earth's surface.	The hills showed signs of weathering becoming smooth and rounded.
magma	Hot, molten rock below or within the Earth's crust. Magma forms igneous rock when it cools.	The water is heated by the hot magma which is underground.
Limestone	A sedimentary rock made from the organic remains of sea creatures.	The area is being quarried for limestone.
lava	Hot, molten rock that comes out of the Earth through a volcano. Lava is extremely dangerous and can destroy almost anything in its path, but will eventually cool back into solid rock.	Lava from the volcano was flowing down the hillside
Earth's crust	The outer layer of the Earth. The Earth's crust is constantly moving and is made of huge plates of solid rock. The crust is made of a variety of sedimentary, metamorphic, and igneous rocks.	Earthquakes leave scars in the Earth's crust.
soil	The upper layer of earth, consisting of small loose particles of rock, minerals and humus.	Plants get nutrition from the soil.
mineral	A natural material found on the Earth that is not from plants or animals.	Diamonds are the hardest known mineral.
fossil	The hardened remains or imprint of an ancient living thing, which has been preserved in rock.	This fossil may be over 2 million years old.
sedimentary rock	Rock formed by the compression of sediment. Examples of sedimentary rock include sandstone, limestone and chalk.	Sandstone is a sedimentary rock.
Igneous rock	Rock formed when molten lava or magma cools and solidifies.	Igneous rock forms when magma cools and solidifies.
Metamorphic rock	Rock produced through the transformation of other rock types, under extremes of temperature and pressure. Examples of metamorphic rock include soapstone, marble and slate.	Marble is a metamorphic rock that can be polished.

- **granite** – a hard rock with easy to see crystals



- **pumice** – a light rock with small holes



- **sandstone** – a pale-coloured rock with grain:



- **chalk** – a soft white rock



- **marble** – a white rock with crystals



- **gneiss** – a hard rock with layers



- **crystals**



crystals

- **grains**



grains

- **layers**



layers

- **texture** – what something looks and feels like



- **weathering** – the breaking down of rocks over time



TYPES OF ROCKS

IGNEOUS		SEDIMENTARY		METAMORPHIC	
Granite	Scoria	Sandstone	Limestone	Marble	Slate
Pumice	Obsidian	Conglomerate	Gypsum	Quartzite	Gneiss