Mossfield Primary School Knowledge Organiser

Year 3 — **Rocks, fossils and soils** —Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.

Identify rocks



Group rocks



Test rocks



Local rock survey



Explore fossils



Fossil formation



Explore soil



The importance of soil



To complete a soil experiment



Key Vocabulary

Chalk	Chalk. is a soft, whitish rock. It is a type of limestone. Like other forms of limestone, it is made from animal shells and takes many years to form.
Chalky soil	Chalky soil is a light brown soil. Water drains through it quickly.
Clay soil	Clay soil is sticky and doesn't have much air in it. It tends to hold a lot of water.
Crystals	A piece of solid substance which has a natural geometrically regular form.
Deforestation	Deforestation is the clearing, or cutting down, of forests .
Fossil	Remains or impression of a prehistoric plant or animals embedded in rock.
Fossilisation	A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.
Gneiss	Gneiss is a metamorphic rock which means it is made up of bits of igneous or sedimentary rocks. It is known for its unique layers and bands.
Grains	A mineral or rock particle having a diameter of less than a few millimetres and generally lacking well-developed crystal faces; e.g., a sand grain.
Granite	Granite is the most common igneous rock in the Earth's crust. It was formed ages ago when magma (molten rock) cooled.
Habitat loss	Habitat loss is the destruction or alteration of the necessary conditions for plants and animals to survive in a particular place.
Hardness	The hardness of a mineral is a way of describing how easy or difficult it is to scratch the mineral.
Layers	A section of something that alternates with a different material from top to bottom.
Marble	Marble is a type of natural stone found on Earth and is usually white, though it can come in a variety of colours and patterns.
Nutrients	Nutrients are important substances you get from food that help your body survive and grow.
Organic matter	It is matter composed of organic compounds that have come from the remains of organisms such as plants and animals and their waste products in the environment.
Peat soil	A damp, dark soil that is made of organic matter that hasn't decayed properly.
Pumice	Pumice is a fine-grained volcanic rock. It is very light grey to medium grey in colour.
Sandstone	Sandstone is a sedimentary rock and is formed over thousands of years of sand being compacted together.
Sandy soil	Sandy soil is a dry soil with lots of air in it. Like the name suggests, sandy soil is mostly made up of sand.
Sediment	Sediment is solid material that is moved and deposited in a new location.
Shell	A hard rigid usually largely calcareous covering or support of an animal
Soil	Soil is a mixture of tiny particles of rocks, organic matter from animals and plants, as well as air and water.
Texture	Texture simply means how something feels when it is touched. If you touched a piece of marble, it might feel smooth and cold.
Weathering	Weathering is a natural process that slowly breaks apart or changes rock. Heat, water, wind, living things, and other natural forces cause weathering.