Year 3 Spring Term

Rocks

Prior knowledge learned in year 2

Not covered - new learning

National Curriculum for year 3

compare and group together different kinds of rocks on the basis of their appearance and simple physical



ROCKS

KNOWLEDGE ORGANISER



Overview



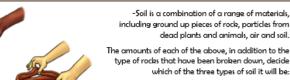
 Rocks are solid objects that are made up of one or more minerals.

 -Scientists classify rocks by how they were formed. The different classifications are sedimentary, metamorphic and igneous.

-Soil is made of very fine rock particles that have mixed with <u>water</u>, <u>air</u> and <u>particles</u> from dead animals and plants. There are also three types of soil.

 Fossils are formed when things that have once lived are trapped within rock.

Soil



-Sandy soil is dry soil with lots of air found in it.

-Clay soil is sticky and doesn't have much air in it. Clay soil often contains a lot of water.

 -Loam soil is somewhere between the two – it has some water in it, and has a bit of air in it.

Loam soil is normally the best type of soil for growing plants in. If you dig through soil, you will find that there are different layers with different features.

Classifications of Rocbs



Sedimentary

 These rocks are formed when small particles of mineral are washed down rivers or other bodies of water.

 They become squashed at the bottom of lakes or and are formed over millions of years as sediment is squashed on top. They are porous (let water through) and can be easily worn down.



Metamorphic

 These rocks are formed when rock becomes warm enough to bend and mould, but not enough to become a liquid.

 -Metamorphic rocks can sometimes form interesting shapes, depending upon how they have been moulded. Normally (but not always) metamorphic rocks are non-porous.



Igneous

-Igneous rocks are formed from magma, a hot underground liquid.

-Sometimes, magma cools under the earth's surface and forms rocks. Other times, magma flow out in volcanic eruptions as lova. It mixes with other minerals to form rocks on the surface. Many igneous rocks are non-porous.



eteorite (not formed on Earth)

-Meteorites are rocks that have landed on Earth from space.

-These rocks were not formed on Earth.

 This means that scientists are able to study planets without ever actually going there.

Fossils

A fossil is the preserved remains of something that was once living. The process in which fossils are formed is called fossilization. Most living things don't become fossilized – it takes very special conditions!

After an animal dies, the soft ports of its body rot away (decompose) leoving just the hard
 things, like teeth and bones.
 2. The remains are buried by sediment.



 As more layers of sediment build on top, the sediment around the remains begins to harden into rock.

4.Water seeps through, dissolving the bones. Minerals replace them, creating a rock replica of the bone – a fossil!

Key vocabulary

Fossils

Soils

Appearance

Properties

Form

Suggested texts

100 questions about rocks and minerals

Foxton – Rocks

Scientists

Mary Anning, Dr. Anjana Khatwa, Ursula Marvin, William Smith, Inge Lehrmasn, Katia Kraft

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.

Sedimentary Rocks			Metam	orphic Rocks			lgn	Igneous Rocks	
Sondstone	Chalk	Limestone	Morble	Slote	Cneiss	Phyllite	Bosalt	Cronite	Pumice

In what ways can rocks be grouped / categorised?

What is a fossil and how are they formed?

What is a soil?

What properties can we assign to rocks?