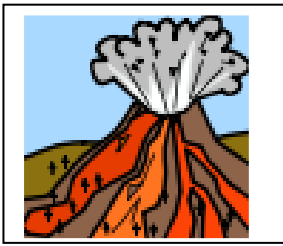


Science – Rocks and Fossils



What I will know by the end of the unit

What are the different types of rocks?

There are three types of rocks that are formed **naturally**.

• When **molten magma** cools, **igneous rocks** are formed.

Sometimes, little pieces of rocks that have been **weathered** can be found at the bottom of lakes, seas and rivers This is called **sediment**.



Over millions of years, layers of this **sediment** builds up forming **sedimentary rocks**. E.g. **Limestone and Chalk**

When some **igneous** and **sedimentary** rocks are heated and squeezed (**pressured**), they form **metamorphic rocks**. E.g. **slate and marble**

Metamorphic rocks are strong

Bricks and concrete are not **rocks** because they are **man-made**.

What are fossils?

Fossils are the remains of **prehistoric** life.



They are usually formed when a living thing (plant or animal) dies and the body is covered up or buried by **sediment** over tens of thousands of years.

Some **fossils** are formed when the tough bones and teeth in animals, and the woody part of plants are **preserved**.

Other **fossils** are made from **imprints** in **surrounding sedimentary rock** such as footprints or **imprints** from shells.

What is soil?

Soil is made from pieces of rock, **minerals**, **decaying** plants and water.

- When **rock** is broken down into small **grains**, **soil** is formed.
- There are layers of **soil**:
- above the soil is **leaf litter** and recently **decaying** plants.

Key Vocabulary

absorbent	soak up or take in
fossil	are the remains or traces of plants and animals that lived long ago.
granite	Granite is an igneous rock composed of mostly two minerals: quartz and feldspar.
igneous	rocks that are formed by volcanic action or intense heat
Impermeable	If a substance is impermeable, something such as water or gas cannot pass through it or soak into it.
man-made	things are created by people
marble	a type of very hard rock which feels cold when you touch it and which shines when it is cut and polished.
metamorphic	rocks that have had their original structure changed by pressure and heat
permeable	if a substance is permeable, something such as water or gas can pass through it or soak into it.
porous	Something that is porous has many small holes in it, which water and air can pass through
Sandstone	a sedimentary rock consisting of usually quartz sand

What I should already know

- The role of Mary Anning in **palaeontology** and the discovery of **fossils**.
- **Soil** contains **nutrients** and these help plants to grow.
- The meaning of the word **absorb**.
- That **magma** is **molten** rock that is formed in very hot conditions inside the earth.

Investigate!

- Explore the types of **rocks** you can find in the local environment
- . Explain why **rocks** are used for different purposes based on their **properties**.