Rocks

Scientific Enquiries











WHO?

Mary Anning





Year 1 & 2 Materials

Chemistry



Vocabulary			
igneous rocks	Rocks made from solidified lava.	sedimentary rocks	Rocks made from layers of sediment (sand, mud etc) that has been subjected to heat and pressure
magma	Hot liquid rock below the surface of the Earth	weathering	The wearing away of rocks which are broken down into smaller pieces
marble	A type of metamorphic rock	fossil	The imprint of a prehistoric plant or animal, embedding into rock
metamorphic rocks	Rocks that have changed from igneous or sedimentary through heat and pressure	fragments	Small pieces of something

WHAT?





- Igneous rocks is one of the 3 main types of rock. It forms when hot, molten rock solidifies after cooling.
- This can occur in **volcanoes** on the surface of the Earth or while the melted rock still remains within the Earth's crust.
- Granite is hard and has crystal inside it
- Pumice has holes in it because it was cooled quickly.





- Sedimentary rocks are formed when layers of sand, bones, pebbles
 etc settle down for a long time. Over millions of years, the layers
 build up and the pressure makes sedimentary rock e.g. chalk and
 limestone.
- Metamorphic rocks start as igneous or sedimentary and change through heat and pressure e.g. marble and slate.





- Weathering is when rock is broken down into smaller pieces because of the environment.
- Rain, wind, pollution, plants and animals can all cause weathering.
- Softer rocks e.g. limestone and chalk are more likely to be affected by weathering.



- Flowing water can erode (break down) rocks which is why pebbles on the beach are smooth.
- Flowing water can also **carry other rocks** which **collide** with each other, causing them to **chip** and **become smaller**.
- **Engineers** and **architects** need to know how water affects rock so they can choose the right **materials** for their outdoor structures (buildings, bridges).





- When a living thing dies, its bones and teeth can become fossilised. Sediment (sand and mud) covers the skeleton, causing pressure and heat. This turns the sediment to rock. After the bones have rotted away, the rock is left over – this is the fossil.
- Fossils are NOT bones.





- There are different types of **soil** based on **colour**, **thickness** and **wetness**. Gardens can have different types of soil, which affects what types of **plants** can grow.
- Soil is made of **fragments** of **rock** and **plants** that have died.
- **Weather** can affect the soil. **Cooler environments** have richer soil that contains **more nutrients**.

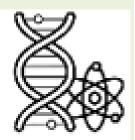
Helpful links

Mary Anning: Fossil Hunter!





What is chemistry?





Where is the best place to find fossils?



Weathering and erosion!

