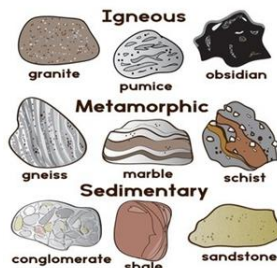


## LKS2 chemistry -

### Key question – How do materials change state?

Vocabulary	Meaning
<b>Rocks</b>	Rock is a naturally occurring solid material composed of one or more minerals. It is a basic component of Earth, providing the main substance of all but the innermost layers. The outer layer of Earth, called the crust, is made up of rigid rock.
<b>sedimentary</b>	Sedimentary rocks are made when sand, mud and pebbles get laid down in layers. Over time, these layers are squashed under more and more layers. Eventually, the layers are lithified – turned to rock. Sedimentary rocks can be formed in deserts, lakes, rivers and seas.
<b>igneous</b>	Igneous is a Latin word that means fire. The rocks are formed when lava or magma cools, hardens, and forms new rocks.
<b>metamorphic</b>	Metamorphic rocks are formed when other rocks are affected by great temperatures and pressures. They do not melt, but the chemicals they contain may change their forms, or crystal shapes.
<b>permeable</b>	A material that allows gases or liquids to pass through it.
<b>impermeable</b>	A material that does not allow gases or liquids to pass through it.
<b>fossils</b>	The remains or impression of a prehistoric plant or animal embedded in rock and preserved in petrified form.
<b>soil</b>	The upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.
<b>Organic matter</b>	Organic matter (or organic material) is matter that has come from a recently living organism. It is capable of decay, or is the product of decay; or is composed of organic compounds.

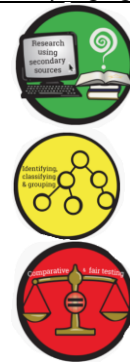


#### Y3 Science Progression - Rocks

Can they compare and group together different rocks on the basis of their appearance and simple physical properties?  
 Can they describe and explain how different rocks can be useful to us?  
 Can they describe and explain the differences between sedimentary and igneous rocks, considering the way they are formed?  
 Can they describe in simple terms how fossils are formed when things that have lived are trapped within rock?  
 Can they recognise that soils are made from rocks and organic matter?

<b>Lesson 1</b> LO: To compare different types of rocks.	What are the 3 types of rock?  How are they formed?
<b>Lesson 2</b> LO: To group rocks.	What is durability?  What does permeable mean?
<b>Lesson 3</b> LO: To explain how fossils are formed.	What are the 3 types of body fossils?
<b>Lesson 4</b> LO: To understand how soil is formed.	What is soil?  What is it made from?
<b>Lesson 5</b> LO: To observe carefully and systematically.	Can you name different types of soil?  Do you know the rocks they are made from?

#### Enquiry types



#### Key Scientist – Mary Anning



English Palaeontologist



#### Science concept story: The Pebble in my Pocket