## Manor Primary School Knowledge Organiser – KS2 Science



Topic: Rocks		Phase: KS2	Strand: Physics	
Key Knowledge         There are three types of naturally occurring rock.       Image: Comparison of the second			We are MANOR! As Scientists we will	
Igneous Sedimentary M	Aetamorphic	Slow uplif to Transport and deposition Igneous rock Sedimentation	Manners	Develop a respect and understanding for the natural world, its people, animals and plants. Share ideas, celebrate good work, value others' contributions, or discussions and debates.
Cranite     Image: Cranit     Image: Cranit	ineiss	Compaction and commentation Magma from molter wars and mental The Rock Cycle explains how and where rocks are made.	Aspiration	Learn by being challenged in a series of well- designed scientific enquiry and investigation tasks linked to meaningful contexts and develop a knowledge of scientists and careers to broaden our horizons. Be aspirational in developing scientific knowledge and conceptual understanding through biology, chemistry and physics.
Basalt		Igneous rocks can become sedimentary rocks when they break down into small fragments that become sediment. Igneous and sedimentary rock can become metamorphic rock if they are heated and put under areat pressure.	Nurture	To recognise that we live in a wonderful world made up of many different people and living things. We will develop an appreciation and respect for the diverse world and environment in which we live, showing care and compassion for the environment around us.
What should I already know?       At the end of the unit, I will be able to:         •       Name places where racks may be found		Open- Mindedness	We will be open-minded so that we can conduct experiments or observe what is happening in order to see patterns that might emerge or to gain new knowledge. We will use our curiosity and learn to	
<ul> <li>The main properties of rock</li> <li>That the 'shape' of a rock is not easily changed.</li> <li>How rocks might be used</li> <li>Why rock would be suitable for objects like walls or bridges</li> </ul>		<ul> <li>besing a reaction of the rest of</li></ul>	Resilience	wonder why something behaves a certain way. Engage confidently with the science curriculum and learn that anything is possible and failure is not something to fear but to learn from. We will develop our scientific enquiry and investigation skills with patience and care, repeating investigations to check the accuracy of results.

Vocabulary				
Igneous rock	Rocks formed from manga or lava that has cooled and solidified			
Sedimentary rock	Rocks that are formed when small fragments of rock and silt form layers and are compressed over a long period of time.			
Metamorphic rock	A type of rock formed when sedimentary or igneous rock is put under intense heat and pressure over a long period of time.			
magma	Molten rock that remains underground			
Ιανα	Molten rock that comes out of the ground is called lava			
permeable	Allows a liquid through it			
impermeable	Does not allow liquid through it			
minerals	Natural chemical substances that do not come from animals or plants. Minerals are the building blocks of rocks.			
Physical weathering	The breaking down of rocks because of physical processes such as temperature change and the effects of wind or water.			

## Fossils

## There are two main types of fossil.

Body fossils are the fossilised remains of a plant or animal



Trace fossils are fossilised records of an animal's behaviour, for example a footprint.



## How are fossils made?

- An animal skeleton or trace is buried under small particles of rock, called sediment.
- As more layers of sediment build up on top, the sediment around the object begins to compact and turn to rock.
- As water seeps through the sedimentary rock, any bones or organic matter are dissolved
  gradually.
- Minerals in the water replace the bone or organic matter, leaving a rock replica of the original. This is called a fossil.
- Weathering and erosion may eventually expose the fossil







Rocks and Fossils Quiz				
1) How many different types of rocks are there? Name them.				
2) How are Igneous rocks made?				
3) Name the fossil that is the fossilised remains of a plant or animal.				
4) True or false? Chalk is a metamorphic rock.				
5) What is lava?				