

What we know already:

*I can identify a variety of everyday materials, including wood, plastic, glass, metal, water and rock.

*I can think about which materials are suitable for different things.

*I know that there are man made materials and natural materials.

*I know that there are many physical features including the beach, cliffs, coasts, forest, hills, mountains, the sea, oceans, rivers, soils, valleys and vegetation.

What's next:

*I can identify sandstone, chalk, granite, slate and marble.

*I know that there are 3 main types of rock: igneous, sedimentary and metamorphic.

*Fossils are created when a plant or animal dies in a watery environment and is buried in mud and silt. The animal's body rots away leaving the hard bones or shells behind. Over time sediment builds over the top and hardens into rock creating a fossil.

*Soil is made from rock and organic matter.

*In Year 6, I will learn how fossils provide information about living things that inhabited the Earth millions of years ago.

Vocabulary:		
Tier 1	Tier 2	Tier 3
Soil Rock	Fossil Decompose Igneous rock Metamorphic rock Minerals Sedimentary rock Erosion	Density - if the particles in the rock are tightly packed then it has a high density. These rocks would sink in water. Pocks with low density would float.
		Durable - rocks which are resistant to erosion so they last longer.
		Magma - melted or liquid material lying below the Earth's surface.
		Impermeable - rocks that do not let water pass through.
		Permeable - rocks that allow water to pass through.
		Organic Matter - living and dead plants and animals.

What are the three main types of rocks?		What are the properties of a rock?	How are fossils formed?	How is soil made?
Rocks have different combinations of properties. Sedimentary rocks (chalk, limestone, sandstone) have visible layers which are called strata. They are often dusty. Igneous rocks (e.g. granite, pumice, basalt) are formed by the cooling down of lava (liquid rock). They have visible holes caused by air bubbles and are light in weight. Metamorphic rocks (marble, slate, gneiss) are multi-coloured, dense, and heavy in weight and contain a number of different grains of minerals.		The way that a rock has been formed leads to its defining properties. Different rocks have different properties. A rock's properties will specify what it is best used for. Permeable / Impermeable Permeable means that air and water can flow through the rock. Impermeable means the grains / crystals are so closely joined together that neither air nor water can flow or get trapped inside the rock.	Fossils are rocks that show evidence of life on Earth millions of years ago. A fossil is physical evidence of a prehistoric plant or animal. Most living things that die do not turn into fossils. It is very rare for fossils to form. Fossils were formed millions of years ago. 1 Plants and animals died and sank to the seabed. 2 The soft parts decayed away leaving the hard parts. 3 The hard parts were covered and squashed by many layers of sand and other materials. 4 The animal/plant matter dissolves and is replaced by minerals, leaving a replica of the original bone called a fossil. Animal fossil  Plant fossil 	Rocks are eroded to create soil Rocks can be eroded by: Rubbing against each other Wind blowing against soft rock Rain washing away soft rock Water being absorbed by rock and then turning into ice - breaking the rock Rivers and waves crashing against banks and cliffs Human and animal movements Plants settling on rocks, climbing on rocks When erosion happens small parts of the rock break away, over time getting smaller and smaller into a grain There are different types of soil.