St John's Primary School: Science knowledge organisers Year group: Year 3 Science focus: Rocks

Key knowledge:		
Types of rock		
Three main	Igneous	
types of rock	Sedimentary	
	Metamorphic	
Igneous	Formed when magma cools and	
Igneous	solidifies it may do this above or	
	below the Farth's surface	
Sedimentary	Formed from particles of sand	
Sedimentary	shells nebbles and other fragments	
	of material Together all these	
	narticles are called sediment	
	Gradually the sediment accumulates	
	into layers and over a long period of	
	time hardens into rock	
Metamorphic	Formed under the surface of the	
Wetaniorphie	earth from the metamorphosis	
	(change) that occurs due to intense	
	heat and pressure (squeezing)	
How can we spot each type of rock2		
Igneous Very hard.		
5	, Contains crystals.	
Sedimentary	Usually crumbly.	
	Allows water through.	
	Made of layers and is stuck together	
	with mineral crystals.	
	Can contain fossils within their	
	layers.	
Metamorphic	Usually hard.	
	May contain tiny crystals or fossils.	
How are fossils formed?		
An animal dies and its skeleton settles on the sea		
floor and is buried by sediment.		
The sediment surrounding the skeleton thickens and		
begins to turn to stone.		
The skeleton dissolves and a mould is formed.		
Minerals crystallise inside the mould and a cast is		
formed.		
The fossil is exposed on the Earth's surface.		
What is soil made from?		
Minerals (small stone fragments: clay, silt or sand).		
Organic Matter (decaying plants and animals).		
Water.		

Air.

Key vocabulary:

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Erosion	The gradual wearing away of something
Solidify	When something becomes solid and
	hard
Tectonic	A layer under the ground made up of
plates	large, moving pieces called plates. All of
	Earth's land and water sit on these
	plates.

Diagrams:



Types of soil



Possible experiences:

Sorting rocks into the three main categories. Visit the beach to see what rocks can be found. Which is the most common? Study the fossil collection. Use magnifying glasses and not down features.

Key concepts:

GroupingDescribingComparingRecognising

