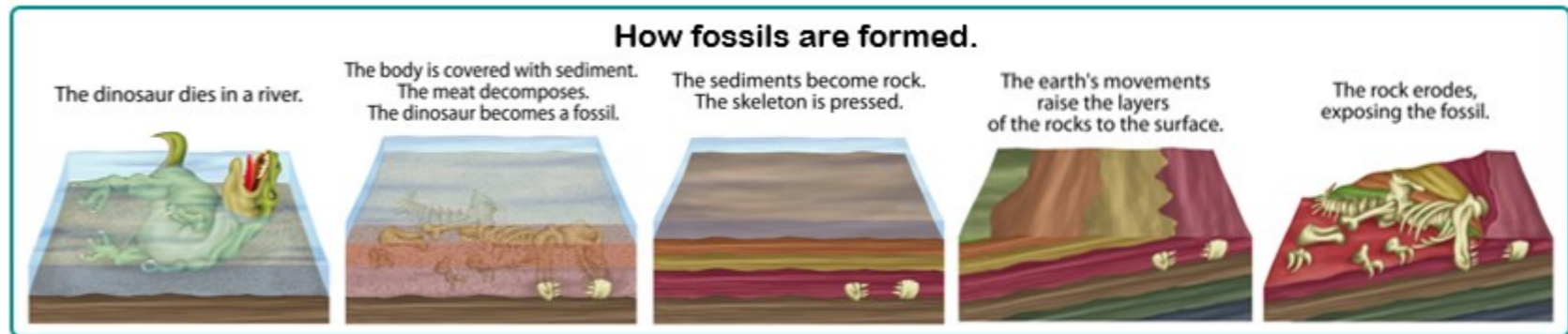


Year 3 Science Spring 1 Unit

Rocks

Progression of Knowledge

Unit	YEAR 3
Rocks	Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. Describe in simple terms how fossils are formed when things that have lived are trapped within rock.



Rocket Words

igneous rocks	rocks created from solidified lava
intrusive igneous rock	rock that has been formed under the Earth's surface over a long period of time
extrusive igneous rock	rock that has been formed from molten lava and either cooled quickly or slowly
magma	hot liquid rock below the surface of the Earth. When a volcano erupts it can be seen, and is called lava
sedimentary rock	rocks that are made from layers of sediment that has been subjected to heat and pressure
metamorphic rock	rocks that have changed from igneous or sedimentary through heat and pressure
weathering	the wearing away of rocks which are broken down into smaller pieces
Acid rain	rain which has been made too acidic by air pollution
erosion	the wearing away of rocks by wind or water
fossil	the imprint of a prehistoric plant or animal embedded in rock
decompose	the process where dead animals and plants break down into smaller parts
fragments	small pieces

Key Scientific Skills	Year3 Rocks
Ask relevant questions and using different types of scientific enquiries to answer them	
Set up simple practical enquiries, comparative and fair tests	
Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	
Gather, record, classify and present data in a variety of ways to help in answering questions	
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	
Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	
Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	
Identify differences, similarities or changes related to simple scientific ideas and processes	
Use straightforward scientific evidence to answer questions or to support their findings	

Sedimentary Rock

These rocks form under the sea. Rocks are broken into small pieces by wind and water (erosion). They settle as mud, sand, minerals and even remains of living things. Over time layers build up and the pressure turns this sediment into rock.

- ### Lesson Sequence
1. Explore the formation and properties of igneous rocks
 2. Explore the formation and properties of sedimentary and metamorphic rocks
 3. Weathering and the suitability of rocks for different purposes
 4. Explore how water contributes to the weathering of rocks
 5. Understand how fossils are formed
 6. Explore different types of soil

Metamorphic Rock

Metamorphic rocks are formed under the surface of the earth from the change (metamorphosis) that occurs under the intense heat and pressure (squeezing).

What is soil made from?

AIR – Oxygen, carbon dioxide, nitrogen
ORGANIC MATTER – Living and dead plants and animals.
WATER – Air and water fill the gaps between particles of soil.
MINERALS – Broken down rock.

Igneous Rock

Far underground the temperature is so hot, rock melts into a liquid (molten rock). When the liquid is underground, it is called magma and it can cool to form igneous rock.