National Curriculum subject content:

- ✓ asking relevant questions and using different types of scientific enquiries to answer them
- ✓ setting up simple practical enquiries, comparative and fair tests
- ✓ making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment,
- ✓ including thermometers and data loggers
- ✓ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- ✓ recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- ✓ reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- ✓ using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- ✓ identifying differences, similarities or changes related to simple scientific ideas and processes
- ✓ using straightforward scientific evidence to answer questions or to support their findings

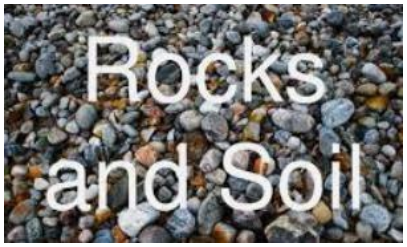
National Curriculum theme:

Pupils should be taught to:

- ✓ 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
- ✓ recognise that soils are made from rocks and organic matter

Science: Rocks and soils

Y3 Autumn Term 1



Key Vocabulary:	
Igneous rock	Rock that has been formed from magma or lava.
Sedimentary rock	Rock that has been formed by layers of sediment being pressed down hard and sticking together. You can see the layers of sediment in the rock.
Metamorphic rock	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.
Magma	Molten rock that remains underground.
Lava	Molten rock that comes out of the ground is called lava.
Sediment	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
Permeable	Allows liquids to pass through it.
Impermeable	Does not allow liquids to pass through it.
Fossilisation	The process by which fossils are made.
Palaeontology	The study of fossils.
Erosion	When water, wind or ice wears away land.

Sequence of Learning:					
Objectives (key knowledge):					
Lesson 1 To be able to compare different types of rocks.	Lesson 2 To learn how to make systematic and careful observations. To know how to group rocks based on their properties	Lesson 3 To be able to explain how fossils are formed.	Lesson 4 To learn about Mary Anning's contribution to palaeontology.	Lesson 5 To explain how soil is formed.	Lesson 6 To observe carefully and systematically. To know how to present my findings using scientific vocabulary.

Sticky knowledge

✓ Soil is the uppermost layer of the Earth. It is a mixture of different things:
- minerals (the minerals in soil come from finely broken-down rock);
- air;
- water;
- organic matter (including living and dead plants and animals).