



Year 3 Autumn 2025 – Rocks

INTENT: What do we want the children to remember/be able to do?

- Describe and sort rocks according to their appearance and physical properties.
- Test rocks to explore their properties (e.g. permeability)
- Understand how fossils are formed and discovered.
- Learn how soil is made and the how the different layers of soil are made up.

National Curriculum Objectives	Hook To Learning	Vocabulary		
• 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	Collection of 6 different rocks A variety of interesting fossils.			
	Key Scientists			
	Mary Anning (Discovery of Fossils) Holly Betts (paleobiologist)	rock stone pebble grain crystals layers texture	permeable impermeable fossil bone flesh minerals	marble chalk granite sandstone slate pumice types of soil (e.g. peaty, sandy, chalky, clay)
Prior Learning	Implementation	Future Learning		
In Year 2 children should: • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • Find out how shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.	1. Explore Knowledge Organiser. Introduce a collection of 6 rocks, play 'Rock Stars' to describe and compare the rocks. 2. Observe and carefully sketch detailed drawings of each of the rocks. Talk4Writing. 3. Understand where rocks come from and introduce the 3 different types of rocks - igneous, sedimentary and metamorphic. Rock Cycle song. 4. Sort a variety of rocks into the 3 different groups - igneous, sedimentary and metamorphic. 5. Letter from Gringotts Bank to find new flooring. Test 6 rocks to discover if they are suitable - look at appearance, how hard wearing the rock is and if it is permeable. 6. Write up results and draw conclusions from last week's experiment. 7. Rocks and their uses. 8. Introduce Roger Rock and Sammy soil. Explain how soil is formed and ask children to order the process. Look at the different layers of soil and analyse types of soil. 9. Introduce fossils and begin to understand how they are formed. Draw and label a variety of fossils. 10. Demonstrate how fossils are formed and children draw and describe the process. 11. Use cookies to explore the role of a Palaeontologist. 12. Explore scientists - Mary Anning and Holly Betts. 13. Make and play fossil game to consolidate understanding of the fossilisation process. 14. Post Assessment.	In Year 4 children will: • Compare and group materials together, according to whether they are solids, liquids or gases. • Observe that some materials change state when heated or cooled, and measure and research the temperature at which this happens in degrees Celsius. • Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. In Year 6 children will: Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.		

Working Scientifically

<u>Comparative tests</u>	<u>Identify & Classify</u>	<u>Observation over time</u>	<u>Pattern Seeking</u>	<u>Research</u>	<u>Impact: BIG Question: Assessment Opportunity</u>
How does adding different amounts of sand to soil affect how quickly water drains through it? Which soil absorbs the most water? 	Can you use the identification key to find out the name of each of the rocks in your collection? 	How does tumbling change a rock over time? 	Is there a pattern in where we find volcanos on planet Earth? 	Who was Mary Anning and what did she discover? 	Post Assessment - Name and describe a variety of rocks Understand how rocks are formed - igneous, sedimentary and metamorphic Test rocks to investigate their individual properties Understand how fossils are formed Recall the names for the different layers of soil