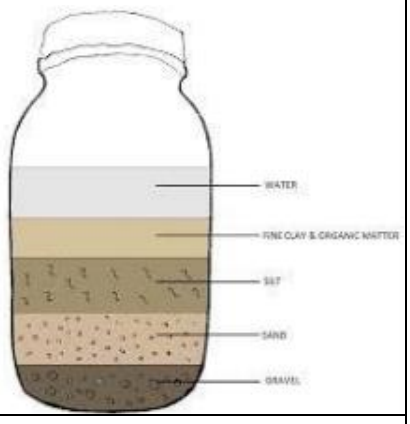
<table>
<tr><th colspan="2">Year 3 – Rocks and Soils (Rocks and Soils)</th></tr>
<tr><td>Links made with other subjects</td><td>English – Dinosaur cove
Geography – Volcanoes. Coasts and Erosion</td></tr>
<tr><td>The BIG Question</td><td>Are all rocks the same?</td></tr>
<tr><td>The BIG Outcome</td><td>Poster/PowerPoint/pic collage presenting all their learning about rocks with annotations</td></tr>
<tr><td>Science objectives
(link to NC)</td><td>- 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.</td></tr>
<tr><td>Prior knowledge
What prior knowledge is needed for children to be successful in this unit?</td><td>Children already know:
EYFS – Understanding the world - Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes.</td></tr>
<tr><td>Future learning
Consider the conceptual knowledge within a subject that pupils need for future learning not just the recall of facts but the importance of concepts</td><td>This unit gives prior knowledge to:
Yr 6 - Evolution and Inheritance</td></tr>
<tr><td>Science strands</td><td><u>Related Enquiry Questions</u>
<table>
<tr><td>Classifying</td></tr>
<tr><td>- Based on the children’s own criteria, classify rocks. (At the beginning of the topic, this will most likely focus on appearance, leading to physical properties at the end of the unit.)
- Look at different soils and discuss how they are similar/different.</td></tr>
<tr><td>Observing over time</td></tr>
<tr><td>Observe how soil separates into different layers in water – see diagram.
  </td></tr>
<tr><td>Pattern Seeking</td></tr>
<tr><td>Not relevant</td></tr>
<tr><td>Comparative testing</td></tr>
<tr><td>-Test the hardness of different rocks.
- Test what happens when rocks are put in water.
- Test how quickly water runs through different types of soil.</td></tr>
<tr><td>Researching</td></tr>
<tr><td>- Research how fossils are formed.</td></tr>
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Vocabulary/ Glossary	Rock, stone, pebble, boulder, grain, crystals, layers, hard, soft, texture, absorb water, soil, fossil, marble, chalk, granite, sandstone, slate, soil, peat, sandy/chalk/clay soil
Knowledge (see italics for knowledge to remember)	The knowledge that children will learn and remember: 1. *Rock is a naturally occurring material.* 2. *There are different types of rock e.g. sandstone, limestone, slate etc. which have different properties.* 3. *Rocks can be hard or soft.* 4. *They have different sizes of grain or crystal.* 5. *They may absorb water.* 6. *Rocks can be different shapes and sizes (stones, pebbles, boulders).* 7. *Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter).* 8. *The type of rock, size of rock pieces and the amount of organic matter affect the property of the soil.* 9. *Some rocks contain fossils. Fossils were formed millions of years ago.* 10. *When plants and animals died, they fell to the seabed. They became covered and squashed by other material. Over time the dissolving animal and plant matter is replaced by minerals from the water*
SEND expectations	1. *Rock is a naturally occurring material.* 2. *There are different types of rock e.g. sandstone, limestone, slate etc. which have different properties.* 3. *Rocks can be hard or soft.* 4. *They may absorb water.* 5. *Rocks can be different shapes and sizes (stones, pebbles, boulders).* 6. *Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter).* 7. *Some rocks contain fossils. Fossils were formed millions of years ago.*
Common Misconceptions	Some children may think: - rocks are all hard in nature - rock-like, man-made substances such as concrete or brick are rocks - materials which have been polished or shaped for use, such as a granite worktop, are not rocks as they are no longer 'natural' - certain found artefacts, like old bits of pottery or coins, are fossils - a fossil is an actual piece of the extinct animal or plant - soil and compost are the same thing.