

Science Scheme of Work

Year 1 – Identifying Materials (Materials and changes of state)											
Links made with other subjects	DT - puppets										
The BIG Question	What are things made from ?										
The BIG Outcome	To complete a tour of the school and its grounds identifying the different objects and what they are made from										
Science objectives (link to NC)	- Distinguish between an object and the material from which it is made. - Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.										
Prior knowledge What prior knowledge is needed for children to be successful in this unit?	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.										
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	This unit gives prior knowledge to: Yr 2 - Changing shape and Uses of materials Yr 4 - Changes of State Yr 5 - Separating mixtures, Types of Change and Materials										
Science strands	<div>Related Enquiry Questions</div> <table><tr><td>Classifying</td></tr><tr><td>Classify objects made from the same material (e.g. lots of things made from plastic). Classify one object made from different materials (e.g. cups made of different materials). Classify different fabrics based on texture (e.g. to make a feely-book for a child). Classify paper/plastics/fabrics.</td></tr><tr><td>Observing over time</td></tr><tr><td>Not relevant</td></tr><tr><td>Pattern Seeking</td></tr><tr><td>Not relevant</td></tr><tr><td>Comparative testing</td></tr><tr><td>- Test objects made of different materials to see how effective they are e.g. umbrellas/hats/coats for waterproofness, cloths/nappies for absorbency, socks for elasticity, bounciness of balls, sunglasses for protection from the sun, picnic plates for stiffness, door mats for wiping your feet, different papers for writing on/painting etc.</td></tr><tr><td>Researching</td></tr><tr><td>Not relevant</td></tr></table>	Classifying	Classify objects made from the same material (e.g. lots of things made from plastic). Classify one object made from different materials (e.g. cups made of different materials). Classify different fabrics based on texture (e.g. to make a feely-book for a child). Classify paper/plastics/fabrics.	Observing over time	Not relevant	Pattern Seeking	Not relevant	Comparative testing	- Test objects made of different materials to see how effective they are e.g. umbrellas/hats/coats for waterproofness, cloths/nappies for absorbency, socks for elasticity, bounciness of balls, sunglasses for protection from the sun, picnic plates for stiffness, door mats for wiping your feet, different papers for writing on/painting etc.	Researching	Not relevant
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Vocabulary/ Glossary	Object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through										
Knowledge (see italics for knowledge to remember)	<i>The knowledge that children will learn and remember:</i> 1. All objects are made of one or more materials.										

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	<ol style="list-style-type: none"> 2. <i>Children recognise that objects such as a chair is made out of the material plastic and distinguish the difference</i> 3. <i>Some objects can be made from different materials e.g. plastic, metal or wooden spoons.</i> 4. <i>E.g chairs can be plastic, wooden or metal framed</i>
SEND expectations	<ol style="list-style-type: none"> 1. <i>All objects are made of one or more materials.</i> 2. <i>Can name some objects and the material they are made from.</i> 3. <i>Recognises that the same object can be made differently</i>
Common Misconceptions	<p>Some children may think:</p> <ul style="list-style-type: none"> - only fabrics are materials - only building materials are materials - only writing materials are materials - the word 'rock' describes an object rather than a material - 'solid' is another word for hard.