<table>
<tr><th colspan="2">Year 1 – Comparing Materials (Materials and changes of state)</th></tr>
<tr><td>Links made with other subjects</td><td>DT – textiles puppets</td></tr>
<tr><td>The BIG Question</td><td>How are things different?</td></tr>
<tr><td>The BIG Outcome</td><td>Explain to their partners/ groups/class the difference between a few materials</td></tr>
<tr><td>Science objectives
(link to NC)</td><td>-Describe the simple physical properties of a variety of everyday materials.
-Compare and group together a variety of everyday materials on the basis of their simple physical properties.</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 2 - Changing shape and Uses of materials
Yr 4 - Changes of State
Yr 5 - Separating mixtures, Types of Change and Materials</td></tr>
<tr><td>Science strands</td><td><u>Related Enquiry Questions</u>
<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></td></tr>
<tr><td>Vocabulary/ Glossary</td><td>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</td></tr>
<tr><td>Knowledge
(see italics for knowledge to remember)</td><td>The knowledge that children will learn and remember:

1. Materials can be described by their properties e.g. shiny, stretchy, rough etc.
2. Some materials e.g. plastic can be in different forms with very different properties.</td></tr>
</table>

	3. *Example strong plastic forks, slides, toys vs flimsy plastic forks/knives. Or water bottles vs chairs*
SEND expectations	1. *Materials can be described by their properties e.g. shiny, stretchy, rough etc.* 2. *Can think of some materials that fit each above property*
Common Misconceptions	Some children may think: - 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.