

## Materials Progression map Year 2

Previous Year: Year 1	Current Year: Year 2	Next Year: Year 3				
<ul style="list-style-type: none"> <li>Distinguish between an object and the material from which it is made.</li> <li>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</li> <li>Describe the simple physical properties of a variety of everyday materials.</li> <li>Compare and group together a variety of everyday materials on the basis of their simple physical properties.</li> </ul>	<ul style="list-style-type: none"> <li>Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</li> <li>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>	<p>These objectives are taken from other areas of Science:</p> <ul style="list-style-type: none"> <li>Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties. (Y3 - Rocks)</li> <li>Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks)</li> <li>Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials. (Y3 - Forces and magnets)</li> </ul>				
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Physical education links:</td> <td style="width: 50%;"><u>Learning Values:</u></td> </tr> <tr> <td style="text-align: center;">-</td> <td> <ul style="list-style-type: none"> <li>-respect</li> <li>-responsible</li> <li>-resourceful</li> <li>-resilient</li> <li>-risk taker</li> </ul> </td> </tr> </table>	Physical education links:	<u>Learning Values:</u>	-	<ul style="list-style-type: none"> <li>-respect</li> <li>-responsible</li> <li>-resourceful</li> <li>-resilient</li> <li>-risk taker</li> </ul>	<p style="text-align: center;"><u>Key learning for the topic:</u></p> <p>All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water. When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials.</p>	<p style="text-align: center;"><u>How can the learning be applied?</u></p> <ul style="list-style-type: none"> <li>Classify materials.</li> <li>Make suggestions about alternative materials for a purpose that are both suitable and unsuitable</li> <li>Test the properties of materials for particular uses e.g. compare the stretchiness of fabrics to select the most appropriate for Elastigirl's costume, test materials for waterproofness to select the most appropriate for a rain hat</li> </ul>
Physical education links:	<u>Learning Values:</u>					
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<p style="text-align: center;"><u>Possible stimulus to teach:</u></p> <p>The Great Paper Caper by Oliver Jeffers</p> <p>Rosie Revere, Engineer by Andrea Beaty &amp; David Robert</p> <p>Flat Stanley by Jeff Brown &amp; Rob Biddulph</p> <p>A Planet Full of Plastic by Neal Layton</p>		<p>Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness</p>				