









# Key Learning – Using Materials

## Year 2 Science

National Curriculum	Images	Vocabulary
<p>Science skills</p> <ul style="list-style-type: none"> <li>• Recalling information.</li> <li>• Applying knowledge in order to make judgements.</li> <li>• Observing closely and using observations to answer simple questions.</li> <li>• Performing simple tests.</li> <li>• Noticing how the shape of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</li> </ul>	 <p><b>wood:</b> hard, stiff, strong, opaque, can be carved into any shape.</p>  <p><b>glass:</b> waterproof, transparent, hard, smooth.</p>  <p><b>plastic:</b> waterproof, strong, can be made to be flexible or stiff, smooth or rough.</p>  <p><b>metal:</b> strong, hard, easy to wash.</p>  <p><b>paper:</b> lightweight, flexible.</p>  <p><b>cardboard:</b> strong, light, stiff.</p>  <p><b>fabric:</b> soft, flexible, hard-wearing, can be stretchy, warm, absorbent.</p>  <p><b>rubber:</b> hard-wearing, elastic, flexible, strong.</p>	<p><b>Materials</b> – are what objects are made from.</p> <p><b>Suitability</b> – this means having the properties that make a material suitable for a specific purpose</p> <p><b>Properties</b> – this is what a material is like and how it behaves eg soft, stretchy, waterproof.</p>

Our planet provides everything that we and all living things need. We call it our **environment**.

1	<p>What Materials can I see around school and in the classroom and where do they come from?</p> <p>Common materials include wood, paper, cardboard, glass, plastic, cotton, wool, metal, stone, brick. Some of these are natural and some are man made. Plastic is used a lot in school and is mostly made from fossil fuels such as oil or natural gas which are mined from the Earth.</p>
2	<p>Why do the properties of certain materials matter?</p> <p>When a product is designed, the material chosen to make it from has to be suitable for its job. For example an umbrella needs to be waterproof and a spade needs to be strong. Windows need to be transparent to let the light through and let us see outside. If a house was made of cardboard it wouldn't be strong enough or waterproof and would fall down.</p>
3	<p>How can we change the shape of objects?</p> <p>We can change the shape of objects by squashing, bending, stretching, or twisting them.</p>
4	<p>Which objects can we change?</p> <p>Some objects are made from strong, hard or rigid materials and will not change shape when we bend, twist, stretch or squash them. It is easier to change the shape of objects that are made from soft, flexible materials.</p>
5	<p>Investigation – What observations can we make?</p> <p>When we add certain substances together sometimes they change or we can see a reaction. We use careful observation skills to see what happens and discuss our ideas for why things happen.</p>
6	<p>Investigation – What observations can we make when we whisk eggs then we heat them?</p> <p>When we heat materials they might change. Often materials will change their state when they are heated. Their state describes whether they are a solid, a liquid or a gas.</p>