



# Leamington Primary Science Knowledge Organiser Year 1

## Everyday materials – *What material is best to make a pair of shoes?*



What I should already know	What I will learn	Important words to help me. (vocabulary)	Useful Diagram																																														
<p>The names of some everyday materials</p>	<p>What are materials? Materials are the substances that things are made from. We use lots of different materials every day eg. metal, plastic, wood and glass.</p> <p><b>Metal:</b></p> <ul style="list-style-type: none"> <li>- Metals are made from rocks</li> <li>- Metals include aluminium, iron and steel</li> </ul> <p><b>Wood:</b></p> <ul style="list-style-type: none"> <li>- Wood is made from trees</li> <li>- Woods include oak, pine and ash</li> </ul> <p><b>Glass:</b></p> <ul style="list-style-type: none"> <li>- Glass is made from fine sand</li> <li>- Glass is used for windows and glasses</li> </ul> <p><b>Plastic:</b></p> <ul style="list-style-type: none"> <li>- Plastics can be made from lots of different materials</li> </ul> <p>Are all materials the same? Every material has different properties, and this is used to work out how effective a material can be, dependent on its intended use.</p> <p>Where do materials come from? Materials can be natural or man-made.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Flexible</td> <td>Able to bend</td> </tr> <tr> <td>Hard</td> <td>Not easily broken</td> </tr> <tr> <td>Man-made materials</td> <td>These are natural materials which are changed by humans through chemical processes.</td> </tr> <tr> <td>Materials</td> <td>The matter from which an object is or can be made.</td> </tr> <tr> <td>Natural materials</td> <td>These are materials that are found naturally in the world around us. They may be grown, dug out from the ground or taken from living things.</td> </tr> <tr> <td>Soft</td> <td>Not firm to touch</td> </tr> <tr> <td>Transparent</td> <td>Can be seen through</td> </tr> <tr> <td>Waterproof</td> <td>Repels water and liquids</td> </tr> </table>	Flexible	Able to bend	Hard	Not easily broken	Man-made materials	These are natural materials which are changed by humans through chemical processes.	Materials	The matter from which an object is or can be made.	Natural materials	These are materials that are found naturally in the world around us. They may be grown, dug out from the ground or taken from living things.	Soft	Not firm to touch	Transparent	Can be seen through	Waterproof	Repels water and liquids	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="text-align: center; font-weight: bold; font-size: small;">Materials and Their Properties</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; font-weight: bold; font-size: small;">Natural and Man-Made Materials</p> <table style="width: 100%; font-size: x-small;"> <thead> <tr> <th colspan="3" style="text-align: left;">Natural Materials</th> <th colspan="3" style="text-align: left;">Man-Made Materials</th> </tr> </thead> <tbody> <tr> <td>chalk</td> <td>sand</td> <td>organic oil</td> <td>concrete</td> <td>glass</td> <td>nylon</td> </tr> <tr> <td>leather</td> <td>iron</td> <td>gold</td> <td>paper</td> <td>synthetic rubber</td> <td>steel</td> </tr> <tr> <td>cotton</td> <td>coal</td> <td>wood</td> <td>plastic</td> <td>rayon</td> <td>polyester</td> </tr> <tr> <td>natural rubber</td> <td>wool</td> <td>silk</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> </div>	Natural Materials			Man-Made Materials			chalk	sand	organic oil	concrete	glass	nylon	leather	iron	gold	paper	synthetic rubber	steel	cotton	coal	wood	plastic	rayon	polyester	natural rubber	wool	silk			
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<p>A spider's web is, weight-for-weight, 10 times as strong as steel, and far more elastic.</p>																																																	

Ideas for Scientific Enquiry
<p>*Explore the types of materials around our classroom.</p> <p>*Explain why different materials are used for different purposes based on their properties.</p> <p>*Compare different types of materials - what is similar and what is different using scientific vocabulary.</p> <p>*Sort different types of materials based on their properties or how it is made.</p>