

## Year 6 Science Map

<b>Working Scientifically</b>	<b>Materials and their Properties</b>	<b>Forces</b>
<ul style="list-style-type: none"> <li>• use scientific ideas when describing simple processes or phenomena identify scientific evidence that is being used to support ideas</li> <li>• recognise scientific questions that as yet do not have definitive answers</li> <li>• describe simple consequences of scientific development</li> <li>• describe different viewpoints that may be held on scientific ideas</li> <li>• identify ethical and moral issues linked to scientific development</li> <li>• use evidence to support scientific ideas</li> <li>• decide on appropriate formats for communicating data</li> <li>• use appropriate scientific language to communicate ideas</li> <li>• identify simple advantages of collaborating on scientific investigations</li> <li>• recognise variables and select those suitable for investigating</li> <li>• repeat sets of observations</li> <li>• identify risks and suggest ways to control them</li> <li>• select equipment and information sources appropriate to an investigation</li> <li>• draw appropriate conclusion from data</li> <li>• recognise inconsistencies in data</li> <li>• identify evidence used in drawing conclusions</li> <li>• suggest improvements to their working methods</li> </ul>	<p>Pupils will be taught to:</p> <ul style="list-style-type: none"> <li>• recognise differences between solids, liquids and gases, in terms of ease of flow and maintenance of shape and volume.</li> <li>• separate solid particles of different sizes by sieving</li> <li>• that some solids dissolve in water to give solutions but some do not</li> <li>• how to separate insoluble solids from liquids by filtering</li> <li>• how to recover dissolved solids by evaporating the liquid from the solution</li> <li>• use knowledge of solids, liquids and gases to decide how mixtures might be separated</li> <li>• that burning materials results in the formation of new materials and that this change is not usually reversible.</li> </ul>	<ul style="list-style-type: none"> <li>• identify that weight is a force and is measured in newtons;</li> <li>• describe some situations in which there is more than one force acting on an object;</li> <li>• draw diagrams to illustrate forces acting on an object;</li> <li>• use a forcemeter accurately to measure forces;</li> <li>• present measurements in simple line graphs and identify patterns in these and evaluate explanations</li> </ul>
	<p><b>Electricity</b></p> <ul style="list-style-type: none"> <li>• associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit</li> <li>• compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches</li> <li>• use recognised symbols when representing a simple circuit in a diagram.</li> </ul>	<p><b>Light</b></p> <ul style="list-style-type: none"> <li>• Use the idea that light travels to explain phenomena</li> <li>• Understand that light travels from light sources to the eye enabling them to be seen.</li> <li>• Know that shiny objects reflect light and that this accounts for their appearance</li> <li>• Know that different shaped and sized shadows can be produced from a single object.</li> </ul>

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