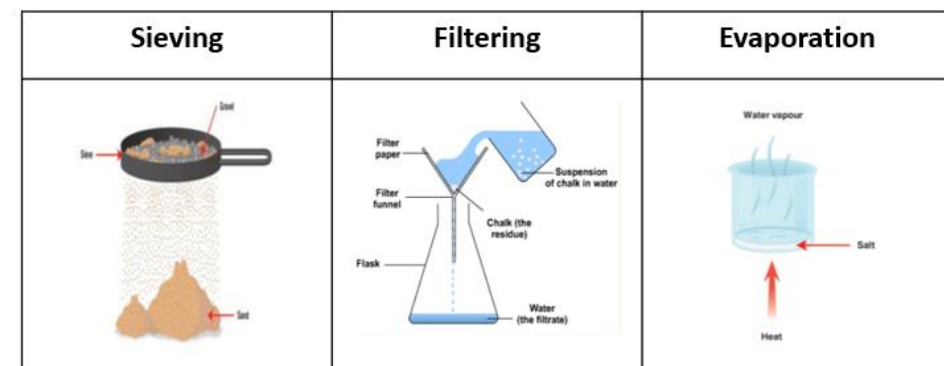
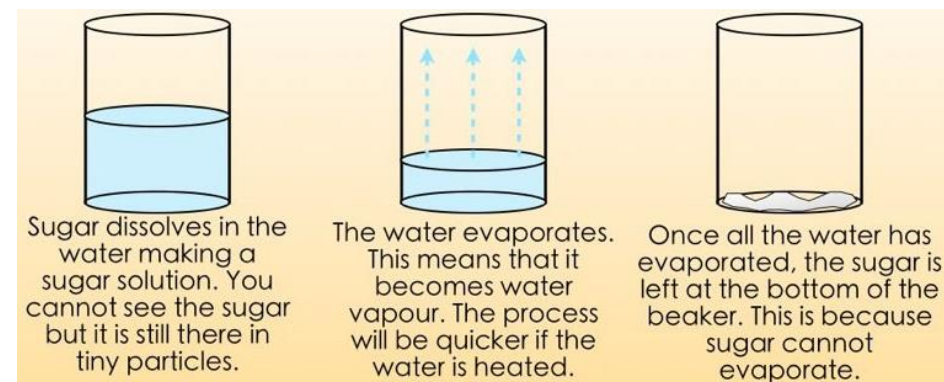
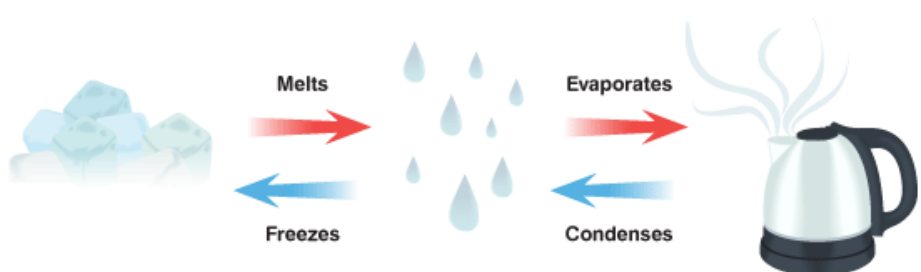
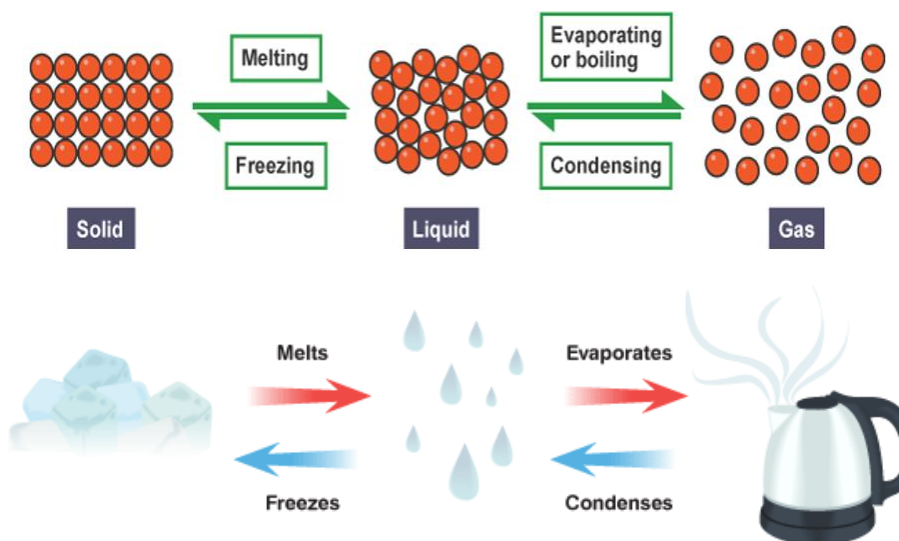




# YEAR 5 - MATERIALS AND THEIR PROPERTIES

<b>Conductor</b>	A material or device which allows heat or electricity to carry through
<b>Thermal</b>	Relating to heat
<b>Flexible</b>	Capable of bending easily without breaking
<b>Reversible change</b>	Able to be reversed back to its original state - Melting and heating are examples of reversible changes.
<b>Irreversible change</b>	Cannot be reversed back to its original state Burning or mixing a liquid with bicarbonate of soda are examples of irreversible changes
<b>Magnetic</b>	Capable of being magnetised or attracted by a magnet
<b>Dissolve</b>	When something solid mixes with a liquid and becomes part of the liquid
<b>Solution</b>	A mixture that contains two or more substances combined evenly.
<b>Soluble</b>	Able to be dissolved, especially in water
<b>Insoluble</b>	impossible to dissolve, esp. in a given liquid
<b>Filtering</b>	a device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.
<b>Sieving</b>	Removal of unwanted items / objects
<b>permeable</b>	a substance that a gas or liquid can pass through
<b>Evaporation</b>	The process of turning from liquid to vapour
<b>Condensation</b>	small drops of water which form when water vapour or steam touches a cold surface, such as a window
<b>Transparent</b>	Allows light to pass through so that objects behind can be seen
<b>Opaque</b>	Not able to be seen through, not transparent



Year 5 – skills and Knowledge	Sticky facts
<p>Compare and group together everyday materials on the basis of their properties, including their <b>hardness, solubility, transparency, conductivity (electrical and thermal)</b>, and response to magnets.</p>	
<p>Know that some materials will <b>dissolve</b> in liquid to form a solution and describe how to recover a substance from a <b>solution</b>.</p>	
<p>Use knowledge of solids, liquids and gases to decide how mixtures might be <b>separated</b>, including through <b>filtering, sieving and evaporating</b>.</p>	
<p>Give reasons, based on evidence from <b>comparative and fair tests</b>, for the particular uses of everyday materials, including metals, wood and plastic.</p>	
<p>Demonstrate that <b>dissolving, mixing and changes of state are reversible changes</b>.</p>	
<p>Explain that some changes result in the formation of new materials, and that this kind of change is <b>not usually reversible (irreversible)</b>, including changes associated with <b>burning</b> and the <b>action of acid on bicarbonate of soda</b></p>	

Year 5 - working scientifically skills	Investigation
<p>planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</p>	
<p>taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p>	
<p>recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p>	
<p>using test results to make predictions to set up further comparative and fair tests</p>	