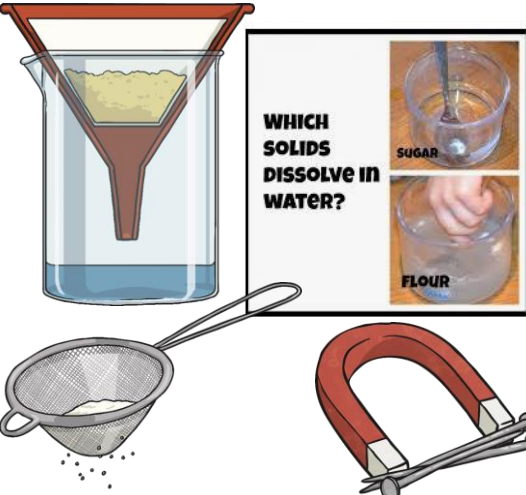


# Year 5: Science – Properties and changes of materials

Subject Specific Vocabulary		Working Scientifically	Sticky Knowledge about Reversible and Irreversible changes
<b>solubility</b>	Is a chemical property referring to the ability for a given substance, the solute, to dissolve in a solvent.	<ul style="list-style-type: none"> <li>❑ Planning different types of scientific enquiries to answer questions, including recognising and controlling variables.</li> <li>❑ Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.</li> <li>❑ Using test results to make predictions to set up further comparative and fair tests.</li> <li>❑ Reporting and presenting findings from enquiries, including conclusions.</li> <li>❑ Identifying scientific evidence that has been used to refute ideas or arguments.</li> </ul> 	<ul style="list-style-type: none"> <li>❑ Irreversible changes, like burning, cannot be undone. Reversible changes, like melting and dissolving, can be changed back again.</li> </ul>
<b>conductivity</b>	Conductivity defines a material's ability to conduct electricity.		<ul style="list-style-type: none"> <li>❑ Mixtures can be separated out by methods like filtering and evaporating. A change is called irreversible if it cannot be changed back again.</li> </ul>
<b>transparency</b>	In general, transparency is the quality of being easily seen through.		
<b>thermal evaporation</b>	Something that is thermal is hot, retains heat, or has a warming effect. Evaporation is the process of a substance in a liquid state changing to a gaseous state due to an increase in temperature and/or pressure.		<ul style="list-style-type: none"> <li>❑ Examples of reversible changes: Melting is when a solid converts into a liquid after heating. An example of melting is turning ice into water. Freezing is when a liquid converts into a solid.</li> </ul>
<b>dissolve</b>	To dissolve is defined as to become broken up or absorbed by something or to disappear into something else.		
<b>bicarbonate of soda</b>	A white water-soluble powder, used chiefly as an antacid, a fire extinguisher, and a leavening agent in baking.		<ul style="list-style-type: none"> <li>❑ A cooked egg cannot be changed back to a raw egg again. Mixing substances can cause an irreversible change. For example, when vinegar and bicarbonate of soda are mixed, the mixture changes and lots of bubbles of carbon dioxide are made. Burning is an example of an irreversible change.</li> </ul>
<b>thermal</b>	Something that is thermal is hot, retains heat, or has a warming effect.		
<b>filtering</b>	To filter a substance means to pass it through a device which is designed to remove certain particles contained within.		
<b>melting</b>	Melting is a physical process that results in the transition of a substance from a solid to a liquid.		
<b>separate</b>	Separate, part, and divide mean to break into parts or to keep apart.		