

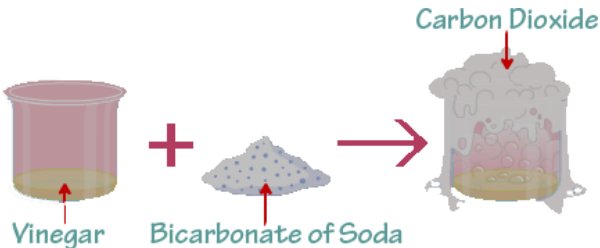



# Mighty Oaks: Amazing Changes Knowledge Organiser

Subject vocabulary		Some changes that cannot be reversed.	Key facts to know by the end of this unit
<b>Irreversible change</b>	A change that cannot be undone. In an irreversible change, new materials are formed.	<ul style="list-style-type: none"> <li>When wood burns you cannot get it back again. It becomes smoke and ash.</li> </ul> 	When vinegar and bicarbonate of soda are mixed, a gas is produced.
<b>chemical change</b>	A change that happens when substances react with one another to create a different substance		When a candle is lit, although the wax melts first, it then releases a gas which burns, making this an irreversible change.
<b>rust</b>	a reddish- or yellowish-brown flaking coating that forms on the surface of iron when exposed to air and moisture	<ul style="list-style-type: none"> <li>When iron rusts this change is irreversible.</li> </ul> 	Cooking causes an irreversible change caused by heat. Often liquids can become solids, such as flour, salt and water being baked to create salt dough or cooking an egg.
<b>reaction</b>	When different materials meet and combine to create new substances.	 <p>Vinegar + Bicarbonate of Soda → Carbon Dioxide</p>	Burning is an irreversible change. The heat from the fire causes some materials to melt before burning. Dangerous gases can be released when some materials burn.
<b>burning</b>	a specific type of chemical change, particularly in fuels		You can spot an irreversible change by looking for: <ul style="list-style-type: none"> <li>Fizzing or bubbling to show a gas is produced</li> <li>The colour changes</li> <li>A liquid becomes solid (heating will not return it to a liquid)</li> <li>A smell is produced</li> <li>The substances become warmer or cooler.</li> </ul>
<b>liquid</b>	Liquids change their shape according to the container they are in	<h2>Cooking Eggs</h2> <p>Cooking eggs is an example of an <b>irreversible change</b>.</p>  <p>uncooked egg → cooked egg</p> <p>It does not matter how the egg is cooked, the change will always be <b>irreversible</b>.</p>	
<b>burning</b>	An irreversible change caused by extreme heat / fire.		