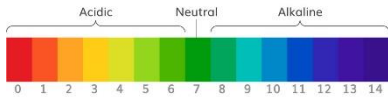




# Leamington Primary Science Knowledge Organiser – Year 5 – Materials - Strand – Chemistry

What I should already know	What I will learn	Important words to help me. (vocabulary)	Ideas for Scientific Enquiry																								
<p>Fingerprints are left on everything you touch.</p> <p>Water evaporates.</p> <p>Chocolate can melt and freeze again.</p>	<p><b>Reversible/irreversible changes:</b> Difference between an <b>Irreversible Change</b> and a <b>Reversible Change</b>. <b>Irreversible changes</b> can't be undone, however, a <b>reversible change</b> means that the original substance can be retrieved. This means that the original substance may look or feel different but the materials are not new. An example: wax when a candle melts may be in a different shape but it is still there when it cools (solidifies). However, the candle wick is irreversible, as once it's burnt, it cannot be retrieved.</p>	<table border="1"> <tr> <td>Alkali</td> <td>Alkali has a ph more than 7.</td> </tr> <tr> <td>Acid</td> <td>Acidic liquid with a ph of less than 7.</td> </tr> <tr> <td>Bicarbonate of soda</td> <td>An alkali that reacts with acids.</td> </tr> <tr> <td>Dissolve</td> <td>(With reference to a solid) become or cause to become incorporated into a liquid so as to form a solution.</td> </tr> <tr> <td>Dusting</td> <td>The process of <b>dusting</b> for <b>fingerprints</b> involves various methods intended to get the particles of the powder to adhere to residue left by friction ridge skin on the fingers.</td> </tr> <tr> <td>Evaporate</td> <td>Turn from liquid into vapour.</td> </tr> <tr> <td>Insoluble solution</td> <td>Does not dissolve in a liquid.</td> </tr> <tr> <td>Irreversible</td> <td>A <b>change</b> is called <b>irreversible</b> if it cannot be changed back again. In an <b>irreversible change</b>, new materials are always formed. Sometimes these new materials are useful to us.</td> </tr> <tr> <td>Reversible</td> <td><b>Reversible changes</b> are <b>changes</b> that can be undone or reversed. Melting, freezing, boiling, evaporating, condensing, dissolving and also, <b>changing</b> the shape of a substance are examples of <b>reversible changes</b>.</td> </tr> <tr> <td>Solidifies</td> <td>Make or become hard or solid.</td> </tr> <tr> <td>Soluble solution</td> <td>Dissolves in a liquid.</td> </tr> <tr> <td>Solution</td> <td>A liquid mixture in which the minor component (the solute) is uniformly distributed within the major component (the solvent).</td> </tr> </table>	Alkali	Alkali has a ph more than 7.	Acid	Acidic liquid with a ph of less than 7.	Bicarbonate of soda	An alkali that reacts with acids.	Dissolve	(With reference to a solid) become or cause to become incorporated into a liquid so as to form a solution.	Dusting	The process of <b>dusting</b> for <b>fingerprints</b> involves various methods intended to get the particles of the powder to adhere to residue left by friction ridge skin on the fingers.	Evaporate	Turn from liquid into vapour.	Insoluble solution	Does not dissolve in a liquid.	Irreversible	A <b>change</b> is called <b>irreversible</b> if it cannot be changed back again. In an <b>irreversible change</b> , new materials are always formed. Sometimes these new materials are useful to us.	Reversible	<b>Reversible changes</b> are <b>changes</b> that can be undone or reversed. Melting, freezing, boiling, evaporating, condensing, dissolving and also, <b>changing</b> the shape of a substance are examples of <b>reversible changes</b> .	Solidifies	Make or become hard or solid.	Soluble solution	Dissolves in a liquid.	Solution	A liquid mixture in which the minor component (the solute) is uniformly distributed within the major component (the solvent).	<p><b>Secondary sources</b></p> <p>Researching the different types of fingerprints to find the most common and rarest.</p> <p><b>Comparative test</b></p> <p>Finding out if certain solids evaporate or dissolve in water.</p>
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<p><b>Interesting Facts</b></p> <p>The <b>Arch</b> is the rarest type of fingerprint. In fact, about 5% of the world's population have this fingerprint pattern. Its lack of cores, lines or deltas makes it unique.</p> <p>Bicarbonate of soda reacts most with acids such as vinegar or coke.</p> <p>If the water in the ocean evaporated, salt would be left behind, as salt doesn't evaporate.</p>	<p><b>Dissolve:</b> (with reference to a solid) become or cause to become incorporated into a liquid so as to form a solution. <b>Evaporate:</b> turn from liquid into vapour. Some materials can dissolve in water – this makes a solution (it's new!) If a solid dissolves in water and the water appears clear, it is called a soluble solution. If you can still see the particles it is called an insoluble solution. You can separate salt from water by boiling the solution. The water will evaporate until it is all gone. The salt will be left behind. The <b>salt</b> therefore recrystallizes and can be collected.</p> <p><b>Bicarbonate of soda:</b> <b>Bicarbonate of soda</b>, or <b>baking soda</b>, is an alkali, which means it reacts most with acids such as vinegar and coke.</p> <p><b>Fingerprints:</b> A latent <b>fingerprint</b> is a <b>fingerprint</b> left on a surface as a result of the oils and perspiration from the pores of the finger. We all have unique fingerprints. Arches, loops and whorls are the three type of fingerprint. Three main ways of lifting fingerprints are: UV light, dusting and fuming.</p>	<p><b>Ph Scale</b></p>  <p>0 1 2 3 4 5 6 7 8 9 10 11 12 13 14</p> <p>Acidic Neutral Alkaline</p>  	<p><b>Fair test</b></p> <p>See which liquid reacts most with bicarbonate of soda.</p> <p><b>Observation over time</b></p> <p>Observing which materials go through a reversible change, e.g. wax cooling and solidifying.</p> 