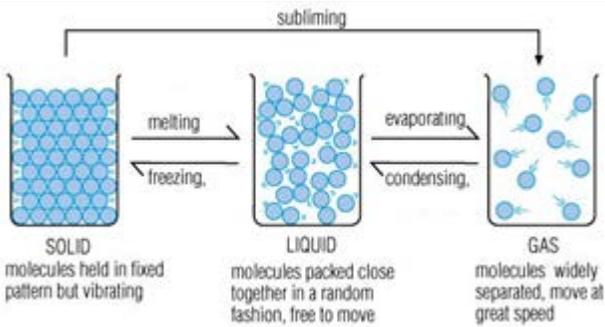
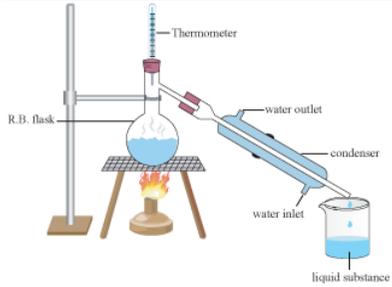
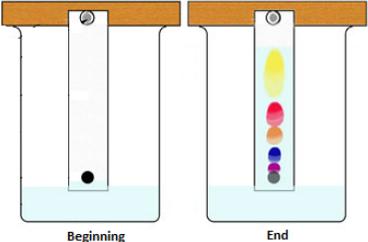
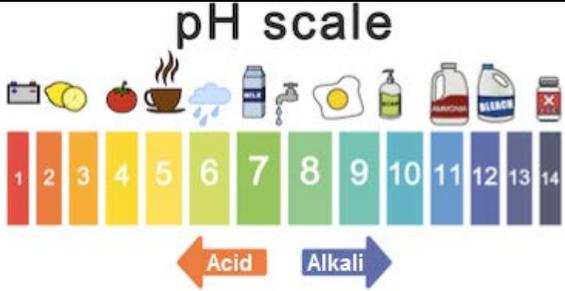


1. States of matter and changing state.	2. Dissolving	3. Distillation
<p>Key ideas:</p> 	 <p style="text-align: center;">Dissolving of Sugar in Water</p>	<p>Key ideas</p>  <p>A method of purifying a mixture using evaporating a condensing. The substances to be separated need to have different boiling points.</p>
<p>Key words</p> <p>State of matter: whether something is a solid, liquid or a gas.</p> <p>Evaporating: when a liquid is heated to form a gas.</p> <p>Melting: when a solid is heated and to form a liquid</p> <p>Freezing: when a liquid cools to form a solid</p> <p>Condensing: when a gas cools to form a liquid</p> <p>Sublimation: when a solid turns straight into a gas, skipping a proper liquid stage.</p> <p>Physical change: when NO chemical reactions occurs e.g. solid water (ice) melting into liquid water is a physical change.</p>	<p>Key words</p> <p>Soluble: A substance that will dissolve in a liquid.</p> <p>Insoluble: A substance that will NOT dissolve in a liquid.</p> <p>Solvent: This is the name of the liquid that you are dissolving the solid into. E.g. water, alcohol, nail varnish remover. Some substances will dissolve in some liquids (solvents), but not in others!</p> <p>Solute: This is the name for the solid that is being dissolved into a liquid.</p> <p>Solution: We say a solution has formed when we dissolve a solid into a liquid. For example, dissolving salt in water produces a salt solution.</p> <p>Saturated solution: We say a liquid (solvent) is saturated, when it cannot dissolve any more solid.</p>	<p>Key words</p> <p>Solute: substance which can be dissolved, sugar for example.</p> <p>Boiling point – the point at which a liquid turns into a gas.</p> <p>Condenser - a piece of equipment that is used to cool the gas back into a liquid so it can be collected.</p> <p>Mixture: A mixture is made from different substances that are not chemically joined. They can be separated from each other without a chemical reaction.</p> <p>Solution – a solvent that has a solute dissolved into it. Eg. Sugar water is a solution, water is the solvent and sugar is the solute.</p>
<p>Action required: Revise this and the relevant pages (p31-34) in your KS3 science guide for a quiz test in class.</p>	<p>Action required: Revise this and the relevant page (p39) in your KS3 science guide for a quiz test in class.</p>	<p>Action required: Revise this and the relevant page (p41) in your KS3 science guide for a quiz test in class.</p>

4. Chromatography	5. Hazard symbols and lab safety	6. Acids and Alkalis
<p>Key ideas</p>  <p>Chromatography is the physical separation of a mixture of substances. Different substances in the mixture will dissolve and move up the paper at different rates.</p>	<p>Key ideas:</p>  <p>Hazard symbols are recognisable symbols designed to warn about dangerous substances. It is important that we work sensibly in a lab to keep the risk low and avoid any accidents.</p>	<p>Key ideas:</p>  <p>pH scale</p>
<p>Key words</p>	<p>Key words</p>	<p>Key words</p>
<p>Baseline – Drawn with a ruler a pencil 1cm from the base of your paper. This is where you will dot your substances to be tested.</p> <p>Solvent – the liquid that you use to run your chromatography. This may be water or an alcohol.</p> <p>Solvent front – This is the height that the solvent reaches on the paper.</p> <p>Dissolve – when a substance is added into a liquid to form a solution.</p> <p>Solubility - how much of a substance will dissolve in a liquid.</p>	<p>Safety Glasses: always worn to protect our eyes during class practical work <u>and</u> when we are clearing up.</p> <p>Hazard: something which could be dangerous.</p> <p>Control: steps we can put in place to lower the risk of a hazard happening.</p> <p>Irritant: something which causes mild discomfort and should be washed off skin immediately.</p> <p>Flammable: something which catches fire easily.</p>	<p>Acid: pH six and lower. Range in colour from yellow to red when using universal indicator. Hydrochloric and sulfuric acid are both common examples.</p> <p>Alkali: pH eight and higher. Range in colour from blue to dark purple. Often cleaning products or substances which contain hydroxide, e.g sodium hydroxide.</p> <p>Indicator: a substance that will change colour to tell us whether something is an acid or an alkali.</p> <p>Neutralisation: a chemical reaction between an acid and an alkali which forms a neutral solution.</p>
<p>Action required:</p>	<p>Action required</p>	<p>Action required</p>
<p>Revise this and the relevant page(p40) in your KS3 science guide for a quiz test in class.</p>	<p>Revise this content for a quiz in class. You may be asked to identify the hazard symbols.</p>	<p>Revise this and the relevant pages (p52-53) in your KS3 science guide for a quiz test in class.</p>