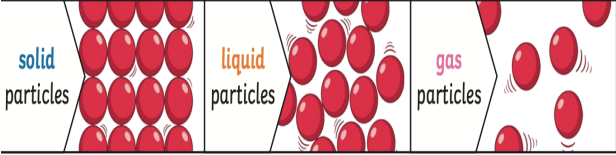
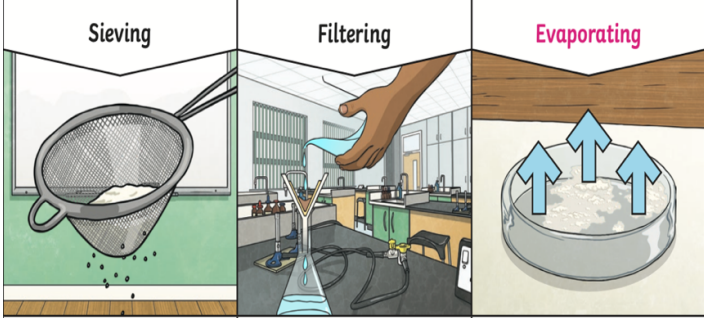


What I should already know	Key Facts – reversible changes	Vocabulary																											
<p>Year 4 Compare and group materials together, according to whether they are solids, liquids or gases. Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C). Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.</p> 	<p>Reversible changes, such as mixing and dissolving solids and liquids together, can be reversed by:</p>  <table border="1" data-bbox="712 778 1413 911"> <tr> <td>Smaller materials are able to fall through the holes in the sieve, separating them from larger particles.</td> <td>The solid particles will get caught in the filter paper but the liquid will be able to get through.</td> <td>The liquid changes into a gas, leaving the solid particles behind.</td> </tr> </table>	Smaller materials are able to fall through the holes in the sieve, separating them from larger particles.	The solid particles will get caught in the filter paper but the liquid will be able to get through.	The liquid changes into a gas , leaving the solid particles behind.	<table border="1" data-bbox="1451 424 2114 911"> <tr> <td>Evaporating</td> <td>When a liquid turns into a gas or vapour.</td> </tr> <tr> <td>Condensing</td> <td>When a gas, such as water vapour, cools and turns into a liquid.</td> </tr> <tr> <td>Conductor</td> <td>A conductor is a material that heat or electricity can easily travel through.</td> </tr> <tr> <td>Insulator</td> <td>An insulator is a material that does not let heat or electricity travel through it.</td> </tr> <tr> <td>Transparency</td> <td>A transparent object lets light through so the object can be looked through.</td> </tr> <tr> <td>Opaque</td> <td>Not able to be seen through, not transparent.</td> </tr> <tr> <td>Translucent</td> <td>A translucent object lets light through but not in enough detail to be seen e.g. frosted glass.</td> </tr> <tr> <td>Reversible change</td> <td>A change in a material that can be easily reversed e.g. melting, freezing.</td> </tr> <tr> <td>Irreversible change</td> <td>A change in a material that cannot be reversed.</td> </tr> <tr> <td>Dissolve</td> <td>When something solid mixes with a liquid and becomes part of the liquid forming a solution.</td> </tr> <tr> <td>Soluble</td> <td>When something is soluble, it can be dissolved e.g. salt in water.</td> </tr> <tr> <td>Insoluble</td> <td>When something is insoluble, it cannot be dissolved e.g. sand in water.</td> </tr> </table>	Evaporating	When a liquid turns into a gas or vapour.	Condensing	When a gas, such as water vapour, cools and turns into a liquid.	Conductor	A conductor is a material that heat or electricity can easily travel through.	Insulator	An insulator is a material that does not let heat or electricity travel through it.	Transparency	A transparent object lets light through so the object can be looked through.	Opaque	Not able to be seen through, not transparent.	Translucent	A translucent object lets light through but not in enough detail to be seen e.g. frosted glass.	Reversible change	A change in a material that can be easily reversed e.g. melting, freezing.	Irreversible change	A change in a material that cannot be reversed.	Dissolve	When something solid mixes with a liquid and becomes part of the liquid forming a solution .	Soluble	When something is soluble, it can be dissolved e.g. salt in water.	Insoluble	When something is insoluble, it cannot be dissolved e.g. sand in water.
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<p>Key facts – Materials and their properties</p> <p>Flexibility – Ability to bend easily without breaking. Hardness – How resistant to denting, scratching or bending a material is Insulators – A material that does not let heat or electricity travel through it. Magnetism – The property of attraction displayed by magnets Solubility – The ability of a substance to dissolve Thermal conductivity – The ability of a material to conduct heat Electrical conductivity – The ability of a material to conduct electricity. Transparency – An object which allows light to pass through it, so you can see through it.</p>	<p>Key facts – Irreversible changes</p> <p>Irreversible changes often result in a new product being made from the old materials (reactants). For example, burning wood produces ash. Mixing vinegar and milk produces casein plastic. A solution is made when solid particles are mixed with liquid particles. Materials that will dissolve are known as soluble. Materials that won't dissolve are known as insoluble. A suspension is when the particles don't dissolve but hang in the liquid.</p> 