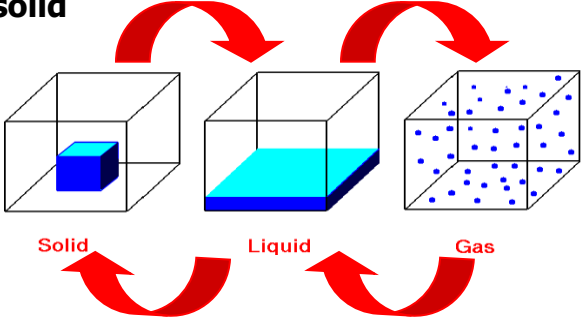


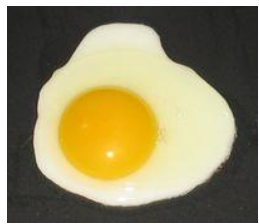
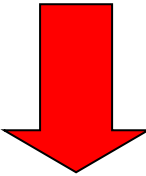



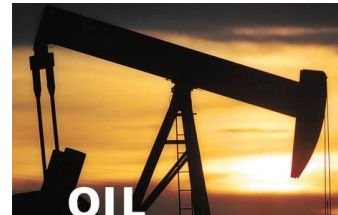


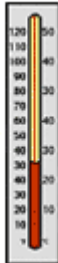
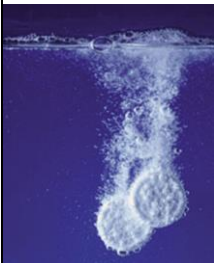


Y5: States of Matter: REVERSIBLE AND IRREVERSIBLE

<h2>Glossary</h2>	<p>Changing state from solid to liquid to gas and back again is a reversible change.</p>  <p>PHYSICAL CHANGE</p>		<p>Any reaction such as burning that causes new substances to be formed is called a CHEMICAL CHANGE the changes are irreversible.</p> 	<p>heating – the process of increasing the temperature</p>
<p>ash – a new substance formed when materials burn</p>				<p>irreversible change – a change that cannot easily be reversed e.g. burning</p>
<p>burning – a chemical change that is irreversible. Burning involves fuel, oxygen and a flame – heat, smoke and ash are produced when things burn</p>				<p>physical changes - are reversible changes – no new substances are produced following the change</p>
<p>change of state – the process of change from one state of matter to another – this is a reversible change</p>	 <p>When chocolate is melted it can solidify again. The change is reversible.</p>	 <p>Cooking eggs by frying, boiling, scrambling, poaching etc. is always an irreversible change.</p>	<p>Fuel + Oxygen + Flame</p>  <p>Ash + Smoke + Heat</p>	<p>precipitate – the name of a solid produced in some chemical reactions</p>
<p>chemical changes – are irreversible changes - new chemicals are produced following the change</p>				<p>reaction – To react - verb</p>
<p>dissolving – the process of a substance becoming part of a liquid – this is a reversible change</p>				<p>renewable energy – a source of energy that does not involve the burning of fossil fuels e.g. wind power</p>
<p>effervesce – to fizz – giving off a gas e.g. soluble antacid tablets – this is an irreversible change</p>	<p>Dissolving sugar in water is a reversible change.</p>  <p>When the water is evaporated it leaves the sugar behind.</p>	 <p>When oil, vinegar and egg yolks are mixed the resulting precipitate is mayonnaise. This change is irreversible.</p>	 <p>Coal, gas and oil are all fossil fuels. They are also examples of non-renewable energy sources.</p> 	<p>reversible change – a change that can be easily reversed e.g. freezing water to make ice</p>
<p>fossil fuel – fuel that comes from the remains of dead animals and plants e.g. coal, oil, gas</p>				<p>substance – a material</p>
<p>hazard – a danger to health and / or life</p>				<p>This wind turbine is part of a wind farm helping to generate electricity from renewable sources.</p> 
<p>Here are some hazard symbols – do you know what they mean?</p> 	 <p>Heating is the process of increasing the temperature. Cooling is the opposite process where temperature is decreased. We use a thermometer to measure temperature.</p>	 <p>When vitamin tablets effervesce (fizz) a gas is produced. This is an irreversible change.</p>		