





## Holy Family Catholic Primary School Cronton

<p><b>Year 5:</b> Science Summer Term 3</p>	<p><b>Unit: 3 &amp; Unit 4</b> Get Sorted and Everyday Materials(2 units)</p>	<p><b>Theme: Properties and Changes of materials.</b></p>																										
<p><b>What I should already know:</b></p> <ul style="list-style-type: none"> <li>* A variety of everyday materials including wood, plastic, glass, metal, water and rock.</li> <li>* The properties of a variety of everyday materials and being able to compare and group materials on the basis of these properties.</li> <li>* How materials are suitably used based on their properties.</li> <li>* Some materials which are magnetic.</li> <li>* How shapes of solid objects can be changed by squashing, bending, twisting and stretching.</li> <li>* Materials that are solids, liquids and gases and their particle structure.</li> <li>* Some materials change state when they are heated or cooled and the temperature at which this happens.</li> <li>* Melting, evaporation and condensation are in the water cycle and the role temperature has on the rate of evaporation.</li> </ul>	<p><b>What I will know by the end of the unit:</b></p> <ul style="list-style-type: none"> <li>*I can compare and group together everyday materials on the basis of their properties, conductivity (electrical and thermal), and response to magnets.</li> <li>*I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.</li> <li>*I can use my knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.</li> <li>*I can give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic.</li> <li>*I can demonstrate that dissolving, mixing and changes of state are reversible changes;</li> <li>*I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda.</li> </ul>	<p><b>Vocabulary</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Condensation</b></td> <td>Small drops of water which form when water vapour or steam touches a cold surface, such as a window.</td> </tr> <tr> <td><b>Conductor</b></td> <td>A material or substance that electricity or heat can pass through or travel along.</td> </tr> <tr> <td><b>Evaporation</b></td> <td>When a liquid turns in to a gas e.g. water in to water vapour.</td> </tr> <tr> <td><b>Filtering</b></td> <td>A device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.</td> </tr> <tr> <td><b>Freezing</b></td> <td>When a liquid turns in to a solid e.g. water to ice.</td> </tr> <tr> <td><b>Insulator</b></td> <td>Something which does not conduct heat or electricity.</td> </tr> <tr> <td><b>Irreversible changes</b></td> <td>When it is impossible to change something back in to its original state.</td> </tr> <tr> <td><b>Melting</b></td> <td>When a solid is turned in to a liquid e.g. ice to water.</td> </tr> <tr> <td><b>Particle</b></td> <td>A small piece or tiny amount of something.</td> </tr> <tr> <td><b>Reversible changes</b></td> <td>When you can change something back in to its original state.</td> </tr> <tr> <td><b>Sieving</b></td> <td>Removing unwanted items by putting it through a sieve.</td> </tr> <tr> <td><b>Solution</b></td> <td>When two or more substances are combined</td> </tr> <tr> <td><b>Transparent</b></td> <td>You can see through the object</td> </tr> </table>	<b>Condensation</b>	Small drops of water which form when water vapour or steam touches a cold surface, such as a window.	<b>Conductor</b>	A material or substance that electricity or heat can pass through or travel along.	<b>Evaporation</b>	When a liquid turns in to a gas e.g. water in to water vapour.	<b>Filtering</b>	A device used to remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.	<b>Freezing</b>	When a liquid turns in to a solid e.g. water to ice.	<b>Insulator</b>	Something which does not conduct heat or electricity.	<b>Irreversible changes</b>	When it is impossible to change something back in to its original state.	<b>Melting</b>	When a solid is turned in to a liquid e.g. ice to water.	<b>Particle</b>	A small piece or tiny amount of something.	<b>Reversible changes</b>	When you can change something back in to its original state.	<b>Sieving</b>	Removing unwanted items by putting it through a sieve.	<b>Solution</b>	When two or more substances are combined	<b>Transparent</b>	You can see through the object
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<p><b>Focus scientist-Spencer Silver &amp; Arthur Fry</b></p> <p><b>Spencer Ferguson Silver III</b> (February 6, 1941 – May 8, 2021) was an American chemist and inventor who specialized in adhesives. </p> <p><b>Arthur Fry</b> (born 19 August 1931) is an American inventor and scientist. He is credited as the co-creator of the <b>Post-it Note</b>, an item of office stationery. As of 2006, Post-it products are sold in more than 100 countries. </p>	<p><b>Key Fact</b></p> <p><b>Thermal properties of materials</b></p> <p>Materials which are good <b>thermal conductors</b> allow heat to move through them easily. </p> <p><b>Thermal insulators</b> do not let heat travel through them easily. E.g. flasks or woollen clothes. </p>																											