



TSS Primary Science MTP 2022-2023 Year 5 Block 3 – Chemistry

Key Targets and Learning Objectives		Key Activities	Equipment
<ul style="list-style-type: none"> • Use the particle model to describe solid, liquids (including solutions) and gases • Understand that substances can be gaseous and know the common gases at room temperature (limited to oxygen, carbon dioxide, water vapour, nitrogen and hydrogen) • Know that the ability of a solid to dissolve and the ability of a liquid to act as a solvent are properties of the solid and liquid • Know the main properties of water (limited to boiling point, melting point, expands when it solidifies, and its ability to dissolve a range of substances) and know that water acts differently from many other substances • Describe the processes of evaporation and condensation, using the particle model and relating the processes to changes in temperature • Understand that dissolving is a reversible process and investigate how to separate the solvent and solute after a solution is formed • Investigate and describe the process of dissolving, and relate it to mixing • Use models, including diagrams, to represent and describe scientific phenomena and ideas (WS) 		<p>Lesson 1 – Diagnostic assessment. Looking at the properties of water. Investigate the melting point, boiling point and what happens to water when it is frozen.</p> <p>Lesson 2 – Make a model of the water cycle and explain evaporation and condensation.</p> <p>Lesson 3 – make a solution (water + salt) and then try to reverse the process.</p> <p>Lesson 4 – Look at reversible and irreversible changes. Children use sodium polyacrylate in nappies to absorb water and then leave to evaporate.</p> <p>Lesson 5 – Using different materials to filter dirty water – link to environmental companies doing similar things.</p> <p>Lesson 6 – End of block assessment. Create their own confectionary using mixing and melting – e.g. chocolate coated peppermint creams.</p> <p>STEM activity – stop the ice melting. Which materials provide the best insulation?</p>	<ul style="list-style-type: none"> • Bowl • Clingfilm • Kettle • Nappies • Funnels and filter paper • Various materials to test insulation • Icing sugar • Chocolate • Eggs • Peppermint essence
Key vocabulary	Going Green Link	Integration of technology	
States of matter, atmosphere, compressed, pollute, pollution, properties, boiling, freezing, melting, thermometer, temperature, evaporation,	<ul style="list-style-type: none"> - Link global warming to the melting of the ice caps and the knock-on effect this has to climate change 	<ul style="list-style-type: none"> - iPads for use in research - Recording videos of chemical change to watch in slow-mo 	



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