



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 it's 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) 		<ul style="list-style-type: none"> • 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. • Lesson 2 – Make a model of the water cycle and explain evaporation and condensation. • Lesson 3 – make a solution (water + salt) and then try to reverse the process. • Lesson 4 – Look at reversible and irreversible changes. Children use sodium polyacrylate in nappies to absorb water and then leave to evaporate. • Lesson 5 – Using different materials to filter dirty water – link to environmental companies doing similar things. • Lesson 6 – End of block assessment. Create their own confectionary using mixing and melting – e.g. chocolate coated peppermint creams. • STEM activity – stop the ice melting. Which materials provide the best insulation? 	<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, condensation, water cycle	Link global warming to the melting of the ice caps and the knock-on effect this has to climate change	iPads for use in research Recording videos of chemical change to watch in slow-mo	