



## TSS Primary Science MTP 2023-24 Year 2 Block 1 – Working Scientifically

Key Targets and Learning Objectives		Key Activities		Equipment
<ul style="list-style-type: none"> <li>• Make and use a physical model of a familiar system or idea</li> <li>• Ask questions about the world around us and talk about how to find answers</li> <li>• Make predictions about what they think will happen</li> <li>• Sort and group objects, materials and living things based on observations of the similarities and differences between them</li> <li>• Use given equipment appropriately</li> <li>• Take measurements in non-standard units</li> <li>• Follow instructions safely when doing practical work</li> <li>• Collect and record observations and/or measurements by annotating images and completing simple tables</li> <li>• Describe what happened during an enquiry and if it matched predictions</li> <li>• Present and interpret results using tables and block graphs</li> </ul>		<ul style="list-style-type: none"> <li>• Ice balloons <a href="#">Y2 Ice balloons.pdf</a> (use balloons instead of containers). Wrap in newspaper – predict what it is at beginning. Use magnify glasses and torches to help with observations. <i>Chemistry</i> link. Describe what they see, hear, feel etc. What questions do they have?</li> <li>• Look at objects that float and sink – sort them into groups. What are they made of? Do any other factors contribute to why they float? <i>Physics</i> link. Why is knowing the best materials that float important?</li> <li>• Make lava lamps - <a href="#">Y2 - lava lamp.pdf</a> <i>Chemistry</i> link.</li> <li>• Make a volcano - <a href="#">Y2 - volcanoes.pdf</a> <i>Chemistry</i> link. How is this model different to a real volcano?</li> <li>• Make a backbone - <a href="#">Y2 Bendy-backbone.pdf</a> <i>Biology</i> link (Good place to introduce vertebrates – which other animals have backbones? Which do not?)</li> <li>• Stop the ice from melting - <a href="https://frugalfun4boys.com/ice-melting-science-experiment/">https://frugalfun4boys.com/ice-melting-science-experiment/</a> Ideally use special ice molds (e.g. penguins, star etc). Could be a <i>Biology</i> link to see which materials insulate the best (How do bears keep warm in the winter?), or <i>Chemistry</i> link, how heat is transferred through different materials</li> </ul> <p>STEAM activity – Build a tower with cards  <a href="https://www.feelgoodteaching.com/2017/05/stem-challenge-card-towers.html">https://www.feelgoodteaching.com/2017/05/stem-challenge-card-towers.html</a></p>		<ul style="list-style-type: none"> <li>• Balloons</li> <li>• Food colouring</li> <li>• Salt</li> <li>• Various objects to test buoyancy</li> <li>• Jar</li> <li>• Cooking oil</li> <li>• Effervescent Tablets</li> <li>• Torches</li> <li>• Magnify glasses</li> <li>• Playdough</li> <li>• Vinegar</li> <li>• Bicarbonate soda</li> <li>• Ice molds</li> <li>• Paper clip – or wire</li> <li>• Straws</li> <li>• Blue tac</li> <li>• Card</li> <li>• Tape</li> </ul>
Key vocabulary	Going Green Link	Integration of technology		
Question, Predict, Observe, Equipment, Measure, Describe, Experiment, Investigate, Safety, Research, Liquid, Vertebrate	Think about: What happens to polar bears when the ice melts? What might happen to us when enough of it melts?	Use of iPads <ul style="list-style-type: none"> <li>- Pictures for observations</li> <li>- Research animals that are vertebrates</li> </ul>		