



TSS Primary Science MTP 2023-24 Year 4 Block 1 – Working Scientifically

Key Targets and Learning Objectives		Key Activities	Equipment
<ul style="list-style-type: none"> • Know that models are not fully representative of a real-world situation and/or scientific idea • Use models to show relationships, quantities or scale • Identify variables that need to be taken into account when doing a fair test • Make a prediction describing some possible outcomes of an enquiry • Use observations and tests to sort, group and classify objects • Choose equipment from a provided selection and use it appropriately • Collect and record observations and/or measurements in tables and in diagrams • Identify whether results support, or do not support, a prediction • Present and interpret results using tables, bar charts and dot plots • Carry out practical work safely 		<ul style="list-style-type: none"> • Children are going to collect information about themselves and their classmates and start to group the information into tables, and simple graphs. Chn will learn how to take averages and will discuss the accuracy and usefulness of the data gathered. – <i>Maths</i> link • Children will make a model of a human hand: https://www.youtube.com/watch?v=GlwCZWfo2s4 . They will discuss why models are useful in science. <i>Biology / art and DT</i> link • Children start to investigate which material is best for a paper airplane. They will be shown the structure of an investigation, and will focus on asking the question, making a prediction, and making accurate measurements. • Children have to measure various things, like the weight of a pencil case, the force needed to pull a chair, to measure the size of the table, book, classroom floor etc. They need to choose the most appropriate equipment to use to measure accurately. • Children have to sort animals into different groups – first into two, then three. They should decide based on their own criteria (e.g. those that fly, or live in water). Eventually they must sort into 5 types of vertebrate – mammals, fish, birds, amphibians, reptiles. – <i>Biology</i> link • Children investigate friction through balloon races. They use their experience from previous investigation to name the different sections on an investigation, but this time focusing on identifying the variables and making a conclusion. – <i>Physics</i> link <p>STEAM activity – Chn must build a tall tower using only paper and 2m tape. The tallest tower wins. Allow time to plan, build and reflect. Children create a success criteria for future projects.</p>	<ul style="list-style-type: none"> • Graph paper • Card • String • Tape • Straws • Paper • Tissue paper • Pictures of animals • Forcemeter • Scales • Measuring tape • Rulers • Trundle wheel
Key vocabulary	Going Green Link	Integration of technology	



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Model, fair test, investigation, prediction, measurements, observation, conclusion, scientific enquiry, Biology, Chemistry, Physics, friction, force	In the 'What in the World?' feature of lessons, include stories about climate change and engage the children in debate about such issues.	Use of iPads - Children use the ipads to research different types of vertebrate	
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