



# Holy Trinity C of E Primary School

## Working Scientifically Progression of Key Skills – TAPs Assessment Overview

	KS1			KS2			
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Planning</b>	<p><b><u>Playing and exploring - engagement</u></b></p> <p>Finding out and exploring</p> <p>Playing with what they know</p> <p>Being willing to 'have a go'</p> <p><b><u>Active learning – motivation</u></b></p> <p>Being involved and concentrating</p> <p>Keeping trying</p> <p>Enjoying achieving what they set out to do</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p><i>Y1 Materials – Reflectiveness</i></p> <p><i>Y2 Materials - Waterproof</i></p>		<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p><i>Y3 Animals inc. Humans – Investigating Skeletons</i></p> <p>Setting up simple practical enquiries, comparative and fair tests</p> <p><i>Y3 Forces – Magnet Tests</i></p> <p><i>Y4 States of Matter – Drying Materials</i></p> <p><i>Y4 Sound – Investigating Pitch</i></p>	<p>Planning different types* of scientific enquiries to answer questions, <i>including their own questions</i>, including recognising and controlling variables where necessary</p> <p>Use test results to make predictions to set up further comparative and fair tests</p> <p><i>Y5 States of Matter – Dissolving</i></p> <p><i>Y5 Forces – Paper Planes</i></p> <p><i>Y6 Electricity – Bulb Brightness</i></p> <p><i>Y6 Animals inc. Humans – Human Heart Rate</i></p>		
<b>Observing</b>	<p><b><u>Creating and thinking critically – thinking</u></b></p> <p>Having their own ideas</p> <p>Making links</p> <p>Choosing ways to do things</p> <p><b><u>Understanding the World:</u></b></p> <p>Children know about similarities and differences in relation to places, objects, materials and living things.</p> <p>They talk about the features of their own immediate environment and</p>	<p>Observing closely, using simple equipment</p> <p><i>Y1 Seasons – Seasonal Change</i></p> <p><i>Y1 Plants – Plant Structure</i></p> <p><i>Y2 Plants – Plant Growth</i></p> <p>Performing simple tests</p> <p><i>Y1 Materials – Floating &amp; Sinking</i></p> <p><i>Y2 Living Things &amp; Their Habitats - Feeding Simulation</i></p> <p>Identifying, sorting and classifying</p> <p><i>Y1 Animals inc Humans – Animal Classification</i></p>		<p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p><i>Y3 Plants – Plant Close Observations</i></p>	<p>Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</p> <p><i>Y5 Animals inc. Humans – Human Growth Survey</i></p>		



## Holy Trinity C of E Primary School

### Working Scientifically Progression of Key Skills – TAPs Assessment Overview

<b>Recording</b>	<p>how environments might vary from one another.</p> <p>They make observations of animals and plants and explain why some things occur and talk about changes.</p> <p><b><u>The Natural World ELG</u></b></p> <p>Children at the expected level of development will:</p> <ul style="list-style-type: none"> <li>Explore the natural world around them, making observations and drawing pictures of animals and plants.</li> <li>Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences and what has been read in class.</li> </ul>	<p>Gathering and recording data to help in answering questions</p> <p><i>Y1 Materials – Bridge Material Tester</i></p> <p><i>Y2 Living Things &amp; Their Habitats – Woodlice Habitats</i></p>	<p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering the questions. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables</p> <p><i>Y3 Light – Making Shadows</i></p> <p><i>Y4 Living Things &amp; Their Habitats – Local Survey of Living Things</i></p>	<p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.</p> <p><i>Y5 States of Matter – Sugar Cubes</i></p> <p><i>Y6 Evolution &amp; Inheritance – Create own adapted animal</i></p> <p><i>Y6 Light – Investigating Shadows</i></p>
<b>Concluding</b>	<ul style="list-style-type: none"> <li>Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter</li> </ul> <p><b><u>TAPs Assessments</u></b></p> <p><b><u>Plan:</u></b> Ask Questions &amp; Plan Enquiry</p> <p><i>Brown Apples</i></p> <p><i>Scoop Sounds</i></p> <p><b><u>Plan:</u></b> Set up enquiry</p> <p><i>Mix Materials</i></p> <p><i>Senses Walk</i></p> <p><b><u>Do:</u></b> Observe &amp; Measure</p> <p><i>Frozen Balloons</i></p> <p><i>Incy Shelter</i></p> <p><b><u>Do:</u></b> Record</p> <p><i>Scavenger Sort</i></p>	<p>Using their observations and ideas to suggest answers to questions</p> <p><i>Y1 Animals inc Humans – Animal Classification</i></p> <p><i>Y1 Animals inc Humans - Human Body Parts</i></p> <p><i>Y2 Animals inc. Humans – Human Handspan</i></p> <p><i>Y2 Animals inc. Humans – Ordering Animal Life Cycles</i></p>	<p>Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions</p> <p>Identifying differences, similarities or changes related to simple scientific ideas and processes</p> <p><i>Y3 Rocks &amp; Soil – Rock Reports</i></p> <p><i>Y4 Electricity – Electrical Conductors</i></p> <p><i>Y4 Sound – String Phones</i></p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p> <p>Using straightforward scientific evidence to answer questions or to support their findings</p>	<p>Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations, using appropriate scientific language</p> <p><i>Y5 Space – Solar System</i></p> <p><i>Y5 Animals inc. Humans – Research: Life Cycle</i></p> <p><i>Y6 Living things &amp; their Habitats – Invertebrate Research</i></p>



## Holy Trinity C of E Primary School

### Working Scientifically Progression of Key Skills – TAPs Assessment Overview

Evaluating	Forensic Footprint		Y4 Animals inc. Humans – Teeth (eggs) in liquid	Explain the degree of trust in results. Identifying and evaluating scientific evidence ( <i>their own and others</i> ) that has been used to support or refute ideas or arguments
	<u>Review: Interpret, Report &amp; Evaluate</u> Butter Toy Forces			Y6 Living Things/Materials - Pollution Survey

Topics based in:

Biology Chemistry Physics

**\*Types of enquiry including: observing changes over time, noticing patterns, grouping and classifying, comparative and fair tests, using secondary sources**

Progression statements are taken directly from England's 2014 National Curriculum, *with small additions in italics from the 2018 Teacher Assessment Framework*