



Progression of Skills in Working Scientifically

<p>These are the minimum end of year expectations for our EYFS learners in relation to Understanding the World</p>		<p>This document shows how Science objectives are designed in a progressive way to ensure learners become more proficient scientists as they move through the school, securing and applying the Science working scientifically objectives. Each teacher should be aware of their own Science objectives, and of those which have come before.</p>					
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Key vocabulary exposed to but not limited too.</p>	<p>Natural world Observe drawing contrasting environments</p>	<p>Observe/observation Identify Gather Record</p>	<p>Observe/observation Tests Identify Classify Gather data Record</p>	<p>Scientific enquiry Fair test Predict Observe Findings Conclusion</p>	<p>Scientific enquiry Fair test Predict Observe Findings Conclusion Gather data Record Classify Present data</p>	<p>Scientific enquiry Fair test Planning Predict Observe Findings Conclusion Gather data Record Classify Present data Controlled variable</p>	<p>Scientific enquiry Fair test Planning Predict Observe Findings Conclusion Classify Present data Comparative test Causal relationships Controlled variable</p>
	<p>During reception, pupils should be taught how to:</p> <ul style="list-style-type: none"> Explore the natural world around them, making observations and drawing pictures of animals and plants Know some similarities and differences between the natural world around them and contrasting environments, drawing on their experiences 	<p>During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content</p> <ul style="list-style-type: none"> observing closely, using simple equipment asking simple questions and recognising that they can be answered in different ways performing simple tests identifying and classifying using their observations and ideas to suggest answers to questions gathering and recording data to help in answering questions. 	<p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers setting up simple practical enquiries, comparative and fair tests 	<p>During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs 			

	<p>and what has been read in class</p> <ul style="list-style-type: none">• Understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.		<ul style="list-style-type: none">• gathering, recording, classifying and presenting data in a variety of ways to help in answering questions• recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables• reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions• using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions• identifying differences, similarities or changes related to simple scientific ideas and processes• using straightforward scientific evidence to answer questions or to support their findings.	<ul style="list-style-type: none">• using test results to make predictions to set up further comparative and fair tests• reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations• identifying scientific evidence that has been used to support or refute ideas or arguments.
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