



Working Scientifically Progression Map

Types of investigations	EYFS	Year 1 and Year 2	Year 3 and Year 4	Year 5 and Year 6
Observing	Closely observes what animals, people and vehicles do The World 8-20 months Use senses to explore the world around them Playing & Exploring Answer how and why questions about their experiences ELG: Understanding Make observations of animals and plants and explain why some things occur, and talk about changes ELG: The World Choose the resources they need for their chosen activities ELG: Self Confidence & Self Awareness Handle equipment and tools effectively ELG: Moving & Handling	Observing closely, using simple equipment	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment including thermometers and data loggers	Taking measurements using a range of scientific equipment with increasing accuracy and precision, taking repeat findings when appropriate.
Identifying and Classifying	Develop ideas of grouping, sequences, cause and effect Creating & Thinking Critically Know about similarities and differences in relation to places, objects, materials and living things ELG: The World	Identifying and classifying	Gathering, recording, classifying and presenting data in a variety of ways to help when answering questions	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
Fair testing/ comparative testing	Find ways to solve problems / find new ways to do things / test their ideas Creating & Thinking Critically	Performing simple tests	Setting up simple practical enquiries, comparative and fair tests	Using test results to make predictions to set up further comparative and fair tests
Testing an explanation	Show curiosity about objects, events and people Playing & Exploring Questions why things happen Speaking: 30-50 months Take a risk, engage in new experiences and learn by trial and error Playing & Exploring	Asking simple questions and recognising that they can be answered in different ways	Asking relevant questions and using different types of scientific enquiries to answer them	Planning different types of scientific enquires to answer questions including recognising and controlling variables where necessary
Observing over time	Choose the resources they need for their chosen activities ELG: Self Confidence & Self	Using their observations and ideas to suggest answers to questions.	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.	Recording data and results of increasing complexity using scientific diagrams and labels, classification

	<p>Awareness Handle equipment and tools effectively ELG: Moving & Handling Create simple representations of events, people and objects Being Imaginative: 40-60+ months Answer how and why questions about their experiences ELG: Understanding Make observations of animals and plants and explain why some things occur, and talk about changes ELG: The World</p>	<p>Gathering and recording data to help when answering questions.</p>	<p>Using straightforward scientific evidence to answer questions or to support their findings. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.</p>	<p>keys, tables, scatter graphs, bar and line graphs.</p>
Patten Seeking	<p>Make links and notice patterns in their experience Creating & Thinking Critically</p>	<p>With guidance, they should begin to notice patterns and relationships</p>	<p>Identifying differences, similarities or changes related to simple scientific ideas and processes</p>	<p>Reporting and presenting findings from enquiries including conclusions, casual relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations.</p>
Designing, inventing, developing systems	<p>Develop their own narratives and explanations by connecting ideas or events ELG: Speaking Builds up vocabulary that reflects the breadth of their experience Understanding: 30-50 months</p>	<p>With help, they should record and communicate their findings in a range of ways and begin to use simple scientific language</p>	<p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>	
Researching secondary sources	<p>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world The World: 30-50 months</p>	<p>Ask people questions and use simple secondary sources to find answers</p>		<p>Identifying scientific evidence that has been used to support or refute ideas or arguments.</p>