



## Science Progression of Skills when Working Scientifically

	Ongoing Skills		Early Learning Goals
<p><b>EYFS</b></p> <p><b>Enquiry Skills</b></p>	<p>Enquiry Skills Show curiosity about objects, events and people.                      Questions why things happen.                      Engage in open-ended activity.                      Take a risk, engage in new experiences and learn by trial and error.                      Find ways to solve problems / find new ways to do things / test their ideas.                      Develop ideas of grouping, sequences, cause and effect.                      Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.                      Use senses to explore the world around them.                      Make links and notice patterns in their experiences.                      Create simple representations of events, people and objects.                      Build up vocabulary that reflects the breadth of their experience</p>		<p>Choose the resources they need for their chosen activities.                      Handle equipment and tools effectively.                      Answer how and why questions about their experiences.                      Make observations.                      Develop their own narratives and explanations by connecting ideas or events.                      Explain why some things occur and talk about changes.</p>
<p><b>Plan</b></p>	<p><b>KS1</b></p> <p>Ask simple questions (when prompted).                       Suggest ways of answering a question.                       Recognise that questions can be answered in different ways.</p>	<p><b>LKS2</b></p> <p>Ask relevant questions (when prompted).                       Use different types of scientific enquiry to answer them.                       Set up simple and practical enquiries, comparative and fair tests (with some support).</p>	<p><b>UKS2</b></p> <p>Plan different types of scientific enquiries to answer questions.                       (With prompting), recognise and control variables where necessary.</p>

<p><b>Do</b></p>	<p>Make relevant observations using simple equipment.</p> <p>Conduct simple tests, (with support).</p> <p>Identify and classify (with guidance).</p>	<p>Make systematic and careful observations using a range of equipment, including thermometers and data loggers.</p> <p>Take accurate measurements using standard units, where appropriate.</p>	<p>Select( with prompting) and use appropriate equipment to take readings.</p> <p>Take precise measurements using standard units.</p> <p>Take repeat readings when appropriate.</p>
<p><b>Record</b></p>	<p>Record and communicate their findings in a range of ways and begin to use simple scientific language.</p> <p>Gather and record data to help answer questions.</p>	<p>(With modelling and guidance), gather, record, classify and present data in a variety of ways to help to answer questions.</p> <p>(With prompting), record findings using simple scientific language, drawings and labelled diagrams.</p> <p>Record findings using keys, bar charts, and tables</p>	<p>Take and process repeat readings.</p> <p>Record data and results.</p> <p>Record data using labelled diagrams, keys, tables and charts.</p> <p>Use line graphs to record data.</p>
<p><b>Review</b></p>	<p>Recognise findings.</p> <p>Use their observations and ideas to suggest answers to simple questions.</p>	<p>Report on findings from enquiries, including oral and written explanations, of results and conclusions.</p> <p>Report on findings from enquiries using displays or presentations.</p> <p>Identify differences, similarities or changes related to simple scientific ideas and processes.</p>	<p>Report and present findings from enquiries, including conclusions and causal relationships.</p> <p>Report and present findings from enquiries in oral and written forms such as displays and other presentation.</p> <p>Report and present findings from enquiries, including explanations of, and degree of, trust</p>

		<p>Use straightforward scientific evidence to answer questions or to support their findings.</p> <p>Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.</p>	<p>in results.</p> <p>Identify scientific evidence that has been used to support or refute ideas or arguments.</p> <p>Use test results to make predictions to set up further comparative and fair tests.</p>
<b>Vocabulary</b>	<p>Questions, answers, equipment, gather, measure, record, results, sort, group, test, explore, observe, compare, describe, similar/ities, different/ces, beaker, pipette, syringe, observe changes over time, notice patterns, secondary sources, hand lenses, egg timers, identify, classify, data.</p>	<p>Previous vocab plus scientific enquiry changes over time, notice patterns, secondary sources, comparative tests, fair tests, careful, accurate, observations, equipment, gather, measure, record, data, evidence, results, keys, bar charts, table, results, conclusions, predictions, support, thermometers, enquiry types increase, decrease, identify, classify, order, notice patterns, relationships, appearance, present results, data loggers</p>	<p>Previous vocab plus, notice patterns, relationships, independent variable, dependent variable, controlled variable, accuracy, precision, degree of trust, classification keys, scatter graphs, line graphs, causal relationships, support/refute, data loggers, opinion/fact, confidently name scientific enquiry types.</p>