



# Science Skills Progression



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Questioning and enquiring</b>	<p>Ask simple questions about the world around us e.g.</p> <p>Recognise that these questions can be answered in different ways (through scientific enquiry)</p>	<p>Ask questions about the world around us</p> <p>Recognise that these questions can be answered in different ways (through scientific enquiry)</p>	<p>Explore and talk about everyday phenomena</p> <p>Develop their ideas about everyday phenomena</p> <p>Begin to develop ideas about functions, relationships and interactions</p> <p>Ask relevant questions related to the scientific area of study</p> <p>Begin to select the most suitable method of enquiry to answer the question</p> <p>Use different types of scientific enquiry to be able to answer the questions</p>	<p>Explore and talk about everyday phenomena</p> <p>Develop their ideas about everyday phenomena</p> <p>Develop ideas about functions, relationships and interactions</p> <p>Ask relevant questions related to the scientific area of study</p> <p>Begin to select the most suitable method of enquiry to answer the question</p> <p>Use different types of scientific enquiry to be able to answer the questions</p>	<p>Ask own questions about scientific phenomena</p> <p>Begin to analyse functions, interactions and relationships systematically</p> <p>Begin to recognise that scientific ideas change over time</p> <p>Begin to select the most appropriate way to answer scientific questions</p> <p>Begin to recognise variables and decide which variable to control</p>	<p>Ask own questions about scientific phenomena</p> <p>Analyse functions, interactions and relationships systematically</p> <p>Recognise that scientific ideas change over time</p> <p>Select the most appropriate way to answer scientific questions</p> <p>Recognise variables and decide which variable to control</p>
<b>Observing and measuring (including pattern seeking)</b>	<p>Observe changes over time</p> <p>Talk about what they are observing and what they are measuring</p> <p>Begin to notice patterns (with support)</p> <p>Measure using non-standard units</p> <p>Measure using standard units e.g. mm, cm, m</p> <p>Use measuring equipment such as</p>	<p>Observe changes over time</p> <p>Talk about what they are observing and what they are measuring</p> <p>Notice simple patterns</p> <p>Measure using standard units e.g. mm, cm, m</p> <p>Use measuring equipment such as rulers, scales and containers</p>	<p>Make choices about what to observe for and the duration of the observation</p> <p>Make systematic and careful observations over time</p> <p>Notice patterns and relationships</p> <p>Take accurate measurements using standard units</p> <p>Use a range of equipment such as data</p>	<p>Make choices about what to observe for and the duration of the observation</p> <p>Make systematic and careful observations over time</p> <p>Notice patterns and relationships</p> <p>Take accurate measurements using standard units</p> <p>Use a range of equipment such as data loggers and thermometers</p>	<p>Make own choices about what to observe, the duration of observation and whether to repeat the observations over time</p> <p>Make precise measurements</p> <p>Select own equipment and explain reason for selecting</p> <p>Explain how to use equipment accurately</p>	<p>Make own choices about what to observe, the duration of observation and whether to repeat the observations over time</p> <p>Make precise measurements</p> <p>Select own equipment and explain reason for selecting</p> <p>Explain how to use equipment accurately</p>

	rulers, scales and containers		loggers and thermometers			
<b>Identifying, grouping and classifying</b>	<p>Identify a variety of objects, materials and living things</p> <p>With support, decided how to sort and group objects, materials and living things</p>	<p>Identify and classify objects, materials and living things</p> <p>Make simple comparisons between objects</p> <p>Group and sort objects, materials and living things</p>	<p>Identify similarities, differences and changes</p> <p>Develop simple criteria for grouping, sorting and classifying</p> <p>Use simple keys when sorting, grouping and classifying</p> <p>Make simple comparisons based on testing</p> <p>Use scientific vocabulary to talk about similarities and differences</p>	<p>Identify similarities, differences and changes</p> <p>Develop simple criteria for grouping, sorting and classifying</p> <p>Use simple keys when sorting, grouping and classifying</p> <p>Make comparisons based on testing</p> <p>Use scientific vocabulary to talk about similarities and differences</p>	<p>Use and develop keys and other information records to identify, classify and describe living things and materials (with some adult support or scaffolding)</p>	<p>Use and develop keys and other information records to identify, classify and describe living things and materials (independently)</p>
<b>Experimenting</b>	<p>Perform simple tests with support.</p> <p>Discuss ideas about how to find things out.</p> <p>Talk about what happened in the experiment</p>	<p>Perform simple tests.</p> <p>Discuss ideas about how to find things out.</p> <p>To say what happened in my investigation.</p>	<p>Set up:</p> <ul style="list-style-type: none"> <li>• Simple practical enquiries</li> <li>• Comparative tests</li> <li>• Fair tests</li> </ul> <p>Begin to identify what makes a fair test and when a fair test is needed (with support)</p> <p>Begin to explain how to set up a fair test</p>	<p>Set up:</p> <ul style="list-style-type: none"> <li>• Simple practical enquiries</li> <li>• Comparative tests</li> <li>• Fair tests</li> </ul> <p>Identify what makes a fair test and when a fair test is needed</p> <p>Explain how to set up a fair test</p>	<p>Make predictions based on findings and use this to set up further experiments</p> <p>Recognise the different variables and identify which variables need to be controlled</p> <p>Identify when and how to set up comparative and fair tests</p>	<p>Make predictions based on findings and use this to set up further experiments</p> <p>Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.</p> <p>Make suggestions to improve the chosen method</p>
<b>Recording of scientific findings</b>	<p>Gather and record data with some adult support, to help in answering questions.</p> <p>Begin to record simple data.</p> <p>Begin to record and communicate findings in a range of ways.</p>	<p>Gather and record data to help in answering questions.</p> <p>Record simple data.</p> <p>Record and communicate findings in a range of ways.</p>	<p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables</p> <p>Make simple conclusions</p>	<p>Gather, record, and begin to classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p>	<p>Gather, record, and begin to classify and present data in a variety of ways to help in answering questions.</p> <p>Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p>	<p>Record data and results with increasing complexity using scientific diagrams and labels, classification keys, tables, bar charts and line graphs</p> <p>Report on findings from enquiries, including oral and written explanations, displays or presentations</p>

	Show results in a simple table	Show results in a simple table		Begin to report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	of results and conclusions.  Decide how to present findings
<b>Research</b>	Use simple secondary sources to find answers  Find information from books, computers and other familiar sources to find information	Use simple secondary sources to find answers.  Find information from books, computers and other familiar sources to find information	Research using secondary sources of information  Recognise when and how secondary sources might help answer to answers questions that cannot be explored practically	Begin to recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.	Recognise which secondary sources will be the most useful to research their ideas  Identify the difference between facts and opinions	Recognise which secondary sources will be the most useful to research their ideas
<b>Scientific Vocabulary</b>	Begin to use simple scientific language     <b>Units:</b> Animals Plants Everyday materials Seasonal change	Use simple scientific language and some science words.  Use comparative language – bigger, faster etc.  <b>Units:</b> Animals including humans Plants Living things and their habitats Everyday materials and their uses	Use relevant scientific language to discuss their ideas  Use comparative and superlative language.  <b>Units:</b> Animals including humans Plants Rocks Light Forces and Magnets	Use scientific language to talk and, later, write about what they have found out.  Use comparative and superlative language  <b>Units:</b> Animals including humans Living things and their habitats States of matter Sound Electricity	Begin to use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas.  Begin to confidently use a range of scientific vocabulary.  <b>Units:</b> Animals including humans Living things and their habitats Properties and changes of material Earth and Space Forces	Use relevant scientific language to discuss, communicate and justify their scientific ideas  Discuss how scientific ideas have changed over time  <b>Units:</b> Animals including humans Living things and their habitats Electricity Evolution and inheritance Light