

# Science Skills Progression



EYFS - ELG statement:

	Y1	Y2	Y3	Y4	Y5	Y6
<b>General/asking questions</b>	Understand the concept of 'a question' by demonstrating curiosity of the world around them.	<p>Be able to ask a question.</p> <p>Understand that some questions can be answered in different ways e.g. testing, observing, research</p>	<p>Be able to ask relevant questions.</p> <p>Be able to suggest one way of finding an answer to a question, e.g. by research, by testing</p> <p>With support, make own decisions about which method of enquiry is best to answer a question.</p>	<p>Be able to ask relevant questions.</p> <p>Be able to suggest more than one way of finding an answer to a question, e.g. by research, by testing.</p> <p>Make own decisions about which method of enquiry is best to answer a question.</p>	<p>Be able to ask appropriate questions that can be investigated/tested.</p> <p>Explore ideas to understand that a range of enquiries can be used together to answer a question.</p>	<p>Refine a scientific question so that it can be investigated/tested.</p> <p>Plan a range of enquiries which can be used together to explore an answer to a question.</p>
<b>Observing changes over time</b>	<p>Understand that observation involves all of the senses.</p> <p>Begin to recognise that some observable features may change over time, e.g. the size of a plant.</p> <p>Use simple equipment provided, e.g. hand lenses, to make simple observations.</p>	<p>Recognise that some observable features may change over time, e.g. the size of a plant.</p> <p>Recognise that some observable features may change over time, and suggest reasons why they have occurred.</p> <p>Use a range of equipment provided, e.g. hand lenses, to make more accurate observations.</p>	<p>Make increasingly careful observations.</p> <p>Be able to select appropriate equipment to observe and measure</p> <p>Accurately use standard measures.</p>	<p>Make systematic observations.</p> <p>Be able to select and use appropriate equipment and explain why particular equipment chosen is appropriate to the task.</p> <p>Use an increasing range of standard measures accurately.</p>	<p>Make systematic and accurate observations.</p> <p>Make their own decisions, using prior knowledge, about what observations to make, what measurements to use and for how long to make them.</p> <p>Take careful measurements, using a selected set of scientific equipment, with increasing accuracy and precision, taking repeat readings when</p>	<p>Be able to explain their systematic and accurate observations.</p> <p>Make their own informed decisions about what observations to make, what measurements to use and for how long to make them, and whether to repeat them.</p> <p>Take increasingly accurate measurements, using a range of scientific equipment, with increasing precision and taking repeat readings</p>

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<b>Comparative and fair tests</b>	Be able to compare features of two objects.	Be able to compare features of two objects; identify and explain what has changed.	Suggest and explain a practical way to find something out.	Suggest and make decisions about which practical method is best to find something out.	Planning different types of scientific enquiries to answer questions.	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
	Identify what a variable is.  Performing simple comparative tests	Identify the two variables in an investigation.  Start to recognise when a test is not fair and suggest improvements.  Performing simple tests.	With others, help to set up a fair test which has two clear variables.	Setting up simple practical enquiries, comparative and fair tests.	Recognise how to set up comparative and fair tests and explain which variables need to be controlled and why.	Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why.
<b>Identifying and classifying</b>	Identify, sort and group objects and living things in their own way.	Identify and classify by recognising similarities and differences.	Be able to group objects and living things in different ways and talk about criteria for grouping, sorting and classifying. e.g. criteria for sorting rocks physical appearance, hardness, texture etc.	Be able to gather, record, classify and present data in a variety of ways to help in answering questions	Be able to independently use simple databases or keys to identify or classify living things, objects or events.	Be able to create more complex forms of classification tools, e.g. databases, branching keys. Understand that broad groupings, such as micro-organisms, plants and animals can be subdivided.
<b>Looking for naturally occurring patterns and</b>	With help, begin to notice what has changed when observing things or events	To begin to notice patterns and relationships from their observations	Make simple predictions  With help, look for changes, patterns, similarities and	Be able to collect data from their own observations and measurements	Identify patterns that might be found in the natural environment	Systematically investigate the relationship between phenomena e.g light and shadows

<b>relationships</b>	<p>Talk about what they found out or what they think might happen</p> <p>With help begin to recognise links between observations and answers to questions</p>	<p>Use evidence to suggest answers to their questions and begin to think about predictions</p> <p>Begin to use simple scientific language to talk about what they found out</p>	<p>differences in their data</p> <p>Notice patterns and relationships</p> <p>Recognise links between observations and answers to questions</p> <p>Begin to draw simple conclusions from their observations</p> <p>Say whether what happened was what they expected and with support, identify new questions arising from their data</p>	<p>Use evidence and patterns in their data to draw simple conclusions, answer questions and make predictions</p> <p>Recognise when a result seems unusual, find ways to improve what they have done and identify when repeated results are necessary</p>	<p>Identify and offer explanations for anomalous results</p> <p>To recognise when evidence supports an idea or not</p>	<p>Look for causal relationships in their data and identify evidence that refutes or supports their ideas</p> <p>Find out how scientific ideas have changed and developed over time as new evidence is discovered</p>
<b>Recording and reporting findings</b>	<p>With help, they should record and communicate their findings in a range of ways (notes, tables and standard units) and begin to use simple scientific language.</p>	<p>Continue to use simple scientific language.</p> <p>Help to make decisions on how to record and analyse data in a range of ways.</p> <p>Begin to identify relevant evidence used to draw conclusions.</p>	<p>Use simple scientific language, drawings, labelled diagrams and keys when recording findings.</p> <p>Reporting on findings from enquiries including oral and written explanations of results and conclusions.</p>	<p>Record findings using relevant scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p> <p>Reporting on findings from enquiries including oral and written explanations, displays and presentations of results and conclusions.</p>	<p>Record findings using relevant scientific language, drawings, labelled diagrams, keys, bar charts and tables.</p> <p>Report findings from enquiries including conclusions, causal relationships in oral and written forms such as displays and other presentations.</p>	<p>Recording findings using precise scientific language, drawings, labelled diagrams, keys, bar charts, line graphs and tables.</p> <p>Report 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.</p>
<b>Researching and</b>	<p>Use simple secondary sources, e.g. books,</p>	<p>Use information from given secondary</p>	<p>Use information from secondary sources to</p>	<p>Use secondary sources and recognise</p>	<p>Use a range of secondary sources and recognise</p>	<p>Use secondary sources, e.g. internet links to</p>

<b>using secondary sources</b>	film, internet, to find information.	sources to help answer a question.	help answer a question	when and how secondary sources might help answer questions that cannot be answered through practical investigations.	which source will be most useful to research their ideas and begin to separate opinion from fact.	research objects, events and phenomena that cannot be experienced in the classroom, e.g. planetary movements, animals from around the world.  Identify scientific evidence that has been used to support or refute ideas or arguments.
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