

Science Progression - Working Scientifically Skills

**Year Group long term plans show context of how these working scientifically skills are taught.*

	EY	Y1	Y2	Y3	Y4	Y5	Y6
Observing over time	<p><u>Knowledge and understanding of the world</u></p> <p>Look closely to spot similarities, differences, patterns and change in the world around them.</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely, using simple equipment</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Observing closely, using simple equipment</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <p>Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions</p>	<p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Using test results to make predictions to set up further comparative and fair tests</p>	<p>Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</p> <p>Using test results to make predictions to set up further comparative and fair tests</p>
Classifying and grouping	<p>To talk about why things happen and how they work.</p> <p>To show concern for the living things around them and talk about some of the things they have observed those living things do.</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Identifying and classifying</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p> <p>Identifying and classifying</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</p> <p>Identifying differences, similarities or changes related to simple scientific ideas and processes</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions</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>	<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>
Pattern seeking		<p>Asking simple questions and recognising that they can be answered in different ways</p>	<p>Asking simple questions and recognising that they can be answered in different ways</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Recording findings using simple scientific language,</p>	<p>Asking relevant questions and using different types of scientific enquiries to answer them</p> <p>Recording findings using simple scientific language,</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</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</p>

Nova Curriculum

		Using their observations and ideas to suggest answers to questions	Using their observations and ideas to suggest answers to questions	drawings, labelled diagrams, keys, bar charts and tables	drawings, labelled diagrams, keys, bar charts and tables	displays and other presentations	displays and other presentations
Comparative and fair testing	To ask simple questions about the world around them and show a natural curiosity to finding out the answers.	Asking simple questions and recognising that they can be answered in different ways	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 Setting up practical enquires, comparative and fair tests Reporting on findings from enquires, 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	Asking relevant questions and using different types of scientific enquiries to answer them Setting up practical enquires, comparative and fair tests Reporting on findings from enquires, 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	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 Using test results to make predictions to set up further comparative and fair tests	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 Using test results to make predictions to set up further comparative and fair tests
Research using secondary sources					Asking relevant questions and using different types of scientific enquiries to answer them Using straightforward scientific evidence to answer questions or to support their findings	Asking relevant questions and using different types of scientific enquiries to answer them Using straightforward scientific evidence to answer questions or to support their findings	Identifying scientific evidence that has been used to support or refute ideas or arguments

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