

Working Scientifically Skills Progression - Science



		KS1		Lower KS2		Upper KS2	
		Y1	Y2	Y3	Y4	Y5	Y6
Approaches to enquiry from NC		<p><i>Children should be <u>helped</u> to develop their understanding of scientific ideas by using different types of scientific enquiry to answer their own questions, including (1) observing changes over a period of time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out simple comparative tests and (5) finding things out using secondary sources of information.</i></p>		<p><i>Children should <u>ask their own questions</u> about what they observe and <u>make some decisions</u> about which types of scientific enquiry are likely to be the best ways of answering them, including (1) observing changes over time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out simple comparative and fair tests and (5) finding things out using secondary sources of information.</i></p>		<p><i>Children should <u>select the most appropriate ways</u> to answer science questions using different types of scientific enquiry, including (1) observing changes over different periods of time, (2) noticing patterns, (3) grouping and classifying things, (4) carrying out comparative and fair tests and (5) finding things out using a wide range of secondary sources of information.</i></p>	
Working Scientifically	Planning	<ul style="list-style-type: none"> asking simple questions and recognising that they can be answered in different ways 		<ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests 		<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary 	
	Observing	<ul style="list-style-type: none"> observing closely, using simple equipment performing simple tests identifying and classifying 		<ul style="list-style-type: none"> making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers 		<ul style="list-style-type: none"> taking measurements, using a range of scientific equipment with increasing accuracy and precision, taking repeat readings when appropriate 	
	Recording	<ul style="list-style-type: none"> gathering and recording data to help in answering questions 		<ul style="list-style-type: none"> gathering, recording, classifying and presenting data in a variety of ways to help in answering questions recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables 		<ul style="list-style-type: none"> recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs reporting and presenting 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 	
	Concluding	<ul style="list-style-type: none"> using their observations and ideas to suggest answers to questions 		<ul style="list-style-type: none"> reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings 		<ul style="list-style-type: none"> reporting and presenting 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 	
	Evaluating			<ul style="list-style-type: none"> using results to draw simple conclusions, make predictions for new values, suggest improvements, and raise further questions. 		<ul style="list-style-type: none"> using test results to make predictions to set up further comparative and fair tests. identifying scientific evidence that has been used to support or refute ideas or arguments 	