



## Science Working Scientifically Progression Plan

	Planning		Observing		Recording	Concluding		Evaluating
Year Group	Asking questions	Planning detail	Using equipment	Making observations	Presenting evidence	Drawing conclusions	Explaining evidence	Evaluating outcomes
Year 3	Asks questions independently and generate own ideas to explore through Scientific enquiry.	<p>Recognises when to answer a question by using a fair test method and when other methods might be needed.</p> <p>In a fair test identifies what to keep the same and sometimes ant to change and measure.</p>	<p>Selects from a wider range of equipment what to use in an investigation.</p> <p>Uses basic equipment correctly, safely and with increasing accuracy.</p>	<p>Makes relevant observations throughout an investigation.</p> <p>Uses standard measuring equipment for quantities, such as volume and temperature.</p>	<p>Gathers, records, classifies and presents data in a variety of ways to help in answering questions.</p> <p>Sometimes creates own tables and bar charts, using ICT where appropriate.</p> <p>Interprets a line graph with support.</p>	<p>Reports on findings from enquiries, including oral and written, displays or presentations of results and conclusions.</p> <p>Makes a general statement about simple patterns they notice in a set of results.</p>	<p>Provides explanations for simple patterns in results, referring to everyday experiences when explaining reasoning.</p>	<p>Suggests how an enquiry might be improved.</p> <p>With support, recognises some of the limitations and significance of evidence.</p>
Year 4	<p>Asks questions and offers ideas for a range of scientific enquiry.</p> <p>With support, improves focus of question to clarify</p>	<p>Knows when to answer a question by using a fair test method and when better evidence could be generated in other ways, e.g. through</p>	<p>Uses a wide range of equipment for example thermometers and data loggers, correctly,</p>	<p>Chooses to make a series of observations that will add to the evidence they collect while</p>	<p>Selects the most appropriate way to present evidence they have collected.</p>	<p>Makes a comparative statement, sometimes referring to the factors under investigation.</p>	<p>Relates explanations of patterns in results to scientific knowledge and understanding when explaining reasoning.</p>	<p>Suggest how much to trust results, identifying some of the limitations of evidence.</p> <p>Suggests new questions and</p>

	its scientific purpose	<p>a survey, diary/log or research.</p> <p>Sets up a fair test controlling variables, what to keep the same, what to change, measure or observe.</p>	<p>safely, and accurately.</p> <p>Deals with most equipment difficulties independently before asking for help if necessary.</p>	<p>investigating.</p> <p>With support, takes accurate readings on measuring equipment, recognising when to repeat them</p>	<p>Records findings using drawings, labelled diagrams, bar charts, tables and graphs, using ICT where appropriate.</p> <p>Uses simple scientific language effectively to communicate outcomes.</p>	<p>Identifies differences, similarities, or changes related to simple scientific ideas and processes.</p> <p>Uses straightforward scientific evidence to answer questions or to support their findings</p>		<p>predictions for setting up further tests.</p>
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Year Group	Asking questions	Planning detail	Using equipment	Making observations	Presenting evidence	Drawing conclusions	Explaining evidence	Evaluating outcomes
Year 5	Independently asks questions and offers ideas for scientific enquiry, which have a clear scientific purpose.	Identifies the most appropriate enquiry methods to use to generate evidence needed to solve problems and answer scientific questions.  Plan familiar enquiry types in appropriate detail	Selects the most appropriate equipment to use in a range of contexts and enquiries.  Takes measurements using a range of science equipment with increasing accuracy and precision.	Chooses to make a series of observations or measurements that will add to the quality of the evidence collected while investigating	Records data and results of increasing complexity using scientific diagrams, classification keys, tables, bar and line graphs and models.  Communicates findings in written form, displays and uses other forms of presentation. Uses scientific language to communicate increasingly detailed analysis.	Where appropriate, makes a comparative statement, describing relationships between factors being investigated.  Uses simple models to help describe scientific ideas	Relates explanations of evidence gathered to scientific knowledge and understanding.  Makes generalisations about what that evidence seems to indicate.	Recognises some of the limitations of their evidence and can suggest why it should not be trusted.  Uses test results to set up further comparative tests.
Year 6	Recognises scientific questions that do not yet have definitive answers.	Selects methods to use to solve problems or answer questions, including a full range of enquiry methods, which are planned in detail.	Explains why particular pieces of equipment or information sources will provide better	Repeats sets of observations or measurements, where appropriate, selecting suitable ranges	Decides on the most appropriate formats to present sets of scientific data, such as using	Uses scientific evidence to answer questions or support findings.	Provides explanations for differences repeated observations or measurements, identifying	Evaluates the effectiveness of their working methods, making practical suggestions for

			quality evidence.	and intervals, to give sufficient depth of evidence.	line graphs for continuous variables.  Communicates findings in written form, across a range of genre, and uses multi-media and other forms of presentation	Draws valid conclusions that utilise more than one piece of supporting evidence.	reasons for any anomalies noticed.	improving them.  Identifies scientific evidence that has been used to support or refute ideas or argument
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