

## Science– Working Scientifically Progression and Skills Document

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	Planning and predicting		Conducting scientific enquiries			Recording , presenting and analysing evidence			Identifying, grouping sorting and classifying	Drawing conclusions and reporting findings	
	Asking scientific questions	Answering scientific questions	Performing enquiries	Observing enquiries	Taking measurements	Recording evidence	Presenting evidence	Analysing evidence		Drawing conclusions	Reporting on findings
K S 1	Pupils should explore the world around them and raise their own simple scientific questions.	Pupils should begin to recognise ways in which they may answer scientific questions by experiencing different types of scientific enquiry.	Pupils should perform simple scientific enquiries.	Pupils should closely observe the simple scientific enquiries they perform.	Pupils should use simple measurements and equipment to gather data. e.g hand lenses and egg timers.	Pupils should, with help, record their observations and simple data in a range of ways .	Pupils should, with help, communicate their findings in a range of ways including talking about what they have found out and how they found it out, using simple scientific language.	Pupils should use their observations, ideas and data to suggest answers to scientific questions	Pupils should use simple features to compare objects, materials and living things and, with help, sort and group them, observing changes over time and beginning to notice patterns and relationships.	Pupils should use their observations, ideas and data to suggest answers to questions.  They should ask people questions and use simple secondary sources to help them find answers to their scientific questions.	
L K S 2	Pupils should be given a range of scientific experiences to enable them to raise their own relevant scientific questions about the world around them.	Pupils should begin to make their own decisions about the most appropriate scientific enquiry to answer a scientific question, recognising when comparative and fair tests are necessary.	Pupils should begin to decide how to set up and perform simple scientific enquiries .	Pupils should make systematic and careful observations of the simple scientific enquiries they perform, beginning to make decisions about what observations to make and how long to make them for.	Pupils should take accurate measurements to gather data, beginning to choose from a range of scientific equipment e.g data loggers	Pupils should record observations and measurements using notes, simple tables and standard units.	Pupils should present their findings using drawings, labelled diagrams, keys, bar charts and tables ,using relevant scientific language.	Pupils should, with help, look for changes, patterns, similarities and differences in their observations and data, in order to draw simple conclusions and answer scientific questions. They should use straightforward evidence to answer questions to support their findings.	Pupils should use criteria for comparing, grouping, sorting and classifying objects, materials and living things and use simple keys.  They should begin to look for patterns and relationships to decide what data to collect to identify them.	Pupils should use their results to draw simple conclusions and, with support, identify new questions, make predictions for new values, within or beyond the data, suggesting improvements and raising further questions.  They should recognise when and how secondary sources might help to answer questions that cannot be answered through practical investigations.	Pupils should report on results of enquiries and conclusions, including oral and written explanations, displays or presentations, using relevant scientific language to discuss and communicate their ideas.
U K S 2	Pupils should use their science experiences to raise a variety of their own relevant scientific questions about the world around them.	Pupils should select and plan the most appropriate type of scientific enquiry to answer their scientific questions, recognising when and how to set up comparative and fair tests and explaining which variables need to be controlled and why.	Pupils should set up and perform increasingly complex scientific enquiries.	Pupils should make their own decisions about what observations to make, which measurements to use, how long to make them for and whether to repeat them.	Pupils should take increasingly accurate and precise measurements to gather data, choosing from a range of scientific equipment, repeating readings when appropriate and explaining how to use it accurately.	Pupils should decide how to record observations and data from a choice of familiar approaches.	Pupils should present their results using increasingly complex scientific diagrams and labels, classification keys, tables, scatter graphs, bar graphs and line graphs.	Pupils should look for different causal relationships in their observations and data, identifying scientific evidence that refutes or supports their ideas.	Pupils should use and develop keys and other information records to identify, classify and describe objects, materials and living things, and identify patterns that may be found in the natural environment.	Pupils should use their results to draw conclusions, raise further questions and identify when further tests and observations may be needed, making predictions to set up further comparative and fair tests.  They should recognise when secondary sources will be most useful to their research ideas and begin to separate opinion from fact, identifying scientific evidence that has been used to support or refute ideas or arguments and how scientific ideas have developed over time.	Pupils should report on results and conclusions of enquiries, including oral and written explanations, displays or presentations, using relevant and increasingly detailed scientific language to discuss, communicate and justify their scientific ideas, including the degree of trust in their results.

