Newton Tony Primary School CE VC Progression of Scientific skills

Year	Asking questions	Observing and measuring	Performing tests	Identifying and classifying	Gathering and recording	Reporting, presenting and
Group					data	communicating data/findings
Reception	Ask questions about	Find out about, and identify,	Investigate objects and	Look closely at similarities,	Through drawing,	Make simple records and
	why things happen and	some features of living	materials by using all their	difference, patterns and	writing, making a model	evaluations of work
	how things work,	things, objects and events	senses as appropriate.	change.	or photographing.	Through talk children discuss
	where they live or in	they observe				their observations of changes
	their natural world.	Introduce vocabulary				and are able to make
		related to their				comparisons.
		observations				
1	Ask simple questions	Observe closely, using	Perform simple tests with	Identify and classify with	Gather and record data	Begin to use observations and
	and recognise that	simple equipment	support	some support. Begin to	with some support to	ideas to suggest answers to
	they can be answered			observe and identify,	help in answering	questions
	in different ways			compare and describe.	questions	
2	Ask simple questions	Observe closely, using	Perform simple tests	Identify and classify.	Gather and record data	Use observations and ideas to
	and recognise that	simple equipment		Observe and identify,	to help in answering	suggest answers to questions
	they can be answered			compare and describe.	questions	
	in different ways					
3	Ask relevant questions	Begin to make systematic	Begin to set up simple	Begin to Identify	Gather, record, classify	Use results to draw simple
	and use different types	and careful observations,	practical enquiries,	differences, similarities or	and present data in a	conclusions, make
	of scientific enquiries	take accurate	comparative and fair tests	changes related to simple	variety of ways to help	predications for new values,
	to answer them	measurements using		scientific ideas and	answer questions	suggest improvements and
		standard units and use a		processes		raise further questions
		range of equipment			Record findings using	
					simple scientific	Report on findings from
					language, drawings,	enquiries including oral and
					labelled diagrams, keys,	written explanations, displays
					bar charts and tables	or presentations of results
						and conclusions
	Ask relevant questions	Make systematic and careful	Set up simple practical	Identify differences,	Gather, record, classify	Use results to draw simple
4	and use different types	observations, take accurate	enquiries, comparative	similarities or changes	and present data in a	conclusions, make
	of scientific enquiries	measurements using	and fair tests	related to simple scientific	variety of ways to help	predications for new values,
	to answer them	standard units and use a		ideas and processes	answer questions	suggest improvements and
		range of equipment				raise further questions
					Record findings using	
					simple scientific	

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					language, drawings, labelled diagrams, keys, bar charts and tables	Report on findings from enquiries including oral and written explanations, displays or presentations of results and conclusions.
5	Begin to plan different types of scientific enquiry to answer questions, including recognising and controlling variables where necessary	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Begin to use test results to make predications to set up further comparative and fair tests	Begin to use and develop keys and other information records to identify, classify and describe living things and materials	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, scatter graphs, bar and line graphs	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms
						that has been used to support or refute ideas or arguments
6	Plan different types of scientific enquiry to answer questions, including recognising and controlling variables where necessary.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Use test results to make predications to set up further comparative and fair tests	Use and develop keys and other information records to identify, classify and describe living things and materials	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, scatter graphs, bar and line graphs	Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms
						Identify scientific evidence that has been used to support or refute ideas or arguments