Grimsargh St Michael's CE Primary School

Working scientifically progression KS1 and KS2

EYFS	 Talk about and draw pictures about what they have seen Find things thatare similar and different Sort uses senses and match Ask a question Talk to people about what they do Talk to people about how things work Work with others on a science task With help follow movements to act out the science they are learning about Come up with new things to try/test Use simple equipment to make observations With prompts say what they have seen/what has happened 						
Year group/Skills	Build up resilience Year 1	e and try different ideas Year 2	Year 3	Year 4	Year 5	Year 6	
Ask questions	Ask simple questions	Ask simple questions and recognise that they can be answered in different ways	• Ask questions and understand there are different enquiry types they could use to answer them	• Ask relevant questions and use different types of scientific enquiry to answer them	Ask scientific questions and begin to understand which questions would be best suited to each enquiry type	Ask relevant scientific questions and choose which enquiry type would be best suited to answer them	
Plan	• Verbally state what they are going to investigate	 Make simple predictions based on a question Identify what they will change and keep the same 	 Make relevant predictions Identify what they will change, observe and keep the same With support, set up simple practical enquiries 	 Make predictions based on simple scientific knowledge Identify what they will change, observe or measure and keep the same 	 Make predictions based on scientific knowledge With support, plan different types of scientific enquiry. Where appropriate, identify the dependent, 	 Make predictions based on scientific knowledge Plan different types of scientific enquiries to answer questions, including recognising and controlling 	

				 Set up simple practical enquiries, comparative and fair tests 	independent and controlled variables	variables where necessary
Make observations	Observe closely	• Observe closely, using simple equipment	• Begin to use scientific equipment to make observations	Make systematic and careful observations	• Use a range of scientific equipment to make systematic and careful observations	• Use a range of scientific equipment to make systematic and careful observations with increased complexity
Take measurements	• Carry out simple tests using nonstandard measurements when appropriate	• Perform simple tests using standard units when appropriate	• Carry out tests and simple experiments and take measurements using standard units	• Take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers	• Take accurate measurements using a range of scientific equipment. Start to take repeat readings when appropriate	• Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
Gather, record and classify data	 Gather and record simple data Sort objects and living things into groups based on simple properties 	 Gather and record data to help in answering questions Identifying and classifying 	 Gather and record data in different ways to help answer questions Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables 	 Gather, record and classify data in a variety of ways to help in answering questions Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables 	 Gather, record and classify data with increasing complexity to help in answering questions Record data using scientific diagrams and labels, classification keys, tables, bar and line graphs 	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
Present findings	• Explain what they found out to an adult or a partner	• Talk about what they have found out and how they found it out. (non-statutory)	• Report on findings from enquiries, including oral and written explanations	 Report on findings from enquiries, including oral and written explanations, 	Report and present findings from enquiries, including conclusions	• Report and present findings from enquiries, including conclusions, causal

				displays or presentations of results and conclusions	• Begin to identify causal relationships in oral and written forms such as displays and other presentations	relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations
Answer questions and make conclusions	• Answer simple questions	• Use their observations and ideas to suggest answers to questions	 Make simple conclusions Use results, findings or observations to answer questions 	 Use straightforward scientific evidence to answer questions or to support their findings Use results to draw simple conclusions Begin to identify differences, similarities or changes related to simple ideas or processes 	 Use scientific evidence to answer questions Make conclusions based on scientific evidence and from their own testing and findings Identify differences, similarities or changes related to simple ideas or processes 	 Use scientific evidence to answer questions Make conclusions based on scientific evidence and from their own testing and findings Identify scientific evidence that has been used to support or refute ideas or arguments
Evaluate (KS2 only)			• Suggest questions for further investigation	• Begin to make predictions for new values, suggest improvements and raise further questions	• Make predictions for new values, suggest improvements and raise further questions	 Use test results to make predictions to set up further comparative and fair test Suggest investigation improvements including accuracy of results

			Provide some simple
			examples of how to
			extend the
			investigation