Working Scientifically Progression Document

Ask Questions					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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.	Make predictions based on simple scientific knowledge. Identify what they will change, observe or	Make predictions based on scientific knowledge. With support, plan different types of scientific enquiry.	Make predictions based on scientific knowledge. Plan different types of scientific enquiries to

		With support, set up simple practical enquiries.	measure and keep the same. Set up simple practical enquiries, comparative and fair tests.	Where appropriate, identify the dependent, independent and controlled variables.	answer questions, including recognising and controlling variables where necessary.

Make Observations					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Carry out simple tests using nonstandard measurements	Perform simple tests using standard units when appropriate.	Carry out tests and simple experiments and take measurements	Take accurate measurements using standard units, using a range of	Take accurate measurements using a range of scientific equipment. Start	Take measurements, using a range of scientific equipment, with

when appropriate		using standard units.	equipment, including thermometers and data loggers.	to take repeat readings when appropriate.	increasing accuracy and precision, taking repeat readings when appropriate..

Take Measurements					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Gather and record simple data.	Gather and record data to help in answering questions.	Gather and record data in different ways to	Gather, record and classify data in a variety of ways to help in	Gather, record and classify data with increasing complexity to	Record data and results of increasing complexity using

Sort objects and living things into groups based on simple properties.	Identifying and classifying.	help answer questions. Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables.	answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables..	help in answering questions. Record data using scientific diagrams and labels, classification keys, tables, bar and line graphs.	scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.

Present Findings					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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, displays or presentations of results and conclusions	Report and present findings from enquiries, including conclusions. Begin to identify causal relationships in oral and written forms such as displays and other presentations.	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 such as displays and

					other presentations.

Answer Questions and make conclusions					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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	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					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		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 tests. Suggest investigation improvements including accuracy of results. Provide some simple examples of how to extend the investigation.