Science Progression: **Working Scientifically**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plan	Asking simple questions	Asking simple questions and recognising that they can be answered in different ways	Asking questions and using different types of scientific enquiries to begin to answer them Setting up simple practical enquiries and fair tests	Asking relevant questions and using different types of scientific enquiries to answer them Setting up simple practical enquiries, comparative and fair tests	Planning different types of scientific enquiries to answer questions	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
Do	Observing and using simple equipment. Performing simple tests with support. Identifying and classifying	Observing closely, using simple equipment Performing simple tests Identifying and classifying	Making careful observations and, where appropriate, taking accurate measurements using a range of equipment, including thermometers Gathering, recording and presenting data to help answer questions	Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units Using a range of equipment, including thermometers and data loggers	Taking measurements, using a range of scientific equipment, with increasing accuracy, and with encouragement taking repeat readings	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
Record	Gathering and recording data as a group	Gathering and recording data to help in answering questions	Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Recording data and results using scientific diagrams and labels, classification keys, tables, bar and line graph	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
Evaluate	Begin to use their observations and ideas to suggest answers to questions	Using their observations and ideas to suggest answers to questions	Reporting on findings from enquiries, including oral and written explanations Using results to begin to draw simple conclusions, make predictions and raise further questions Identifying differences and similarities related to simple scientific ideas Begin to use straightforward scientific evidence to answer questions	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings	Begin to use test results to make predictions to set up further comparative and fair tests Reporting findings from enquiries, including conclusions and explanations, in oral and written forms Identifying scientific evidence that has been used to support ideas	Using test results to make predictions to set up further comparative and fair tests Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations Identifying scientific evidence that has been used to support or refute ideas or arguments

Science Progression: **Working Scientifically Vocabulary**

Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Question	Relevant Questions	Prediction
Questioning	Prediction	Plan
Observe	Plan	Variables
Record	Observations	Observations
Identify	Record	Record
Group	Research	Repeat
Classify	Enquiry	Identify
Sort	Comparative	Comparative
Diagram	Fair	Fair
Table	Accurate	Accurate
Data	Measurements	Precise
	Classify	Scientific Diagrams
	Keys	Classification keys
	Diagrams	Systematic
	Graphs	Graphs (scatter, line, bar)
	Charts	Patterns
	Tables	Interpret
	Conclusion	Conclusion
	Explanation	Explanation
		Relationships
		Evidence
		Validity