All Saints CE Primary School Skills Progression

Working Scientifically

Subject Leader: Gail Sherfield

Planning Investigations

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ask simple questions when prompted	Ask simple questions	Ask relevant questions when prompted	Ask relevant questions	With prompting, plan different types of scientific enquiries to answer questions	Plan different types of scientific enquiries to answer questions
Suggest ways of answering a question	Recognise that questions can be answered in different ways	Set up simple and practical enquiries, comparative and fair tests	Plan different types of scientific enquiries to answer questions	With prompting, recognise and control variables where necessary	Recognise and control variables where necessary
		Set up comparative tests	Set up simple and practical enquiries, comparative and fair tests		

Conducting Experiments

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Make relevant observations	Observe closely, using simple equipment	Make systematic observations, using simple equipment	Make systematic and careful observations using a range of equipment, including thermometers and data loggers	Select, with prompting, and use appropriate equipment to take readings	Take measurements using a range of scientific equipment
Conduct simple tests, with support	Perform simple tests	Use standard units when taking measurements	Take accurate measurements using standard units, where appropriate	Take precise measurements using standard units	Take measurements with increasing accuracy and precision
				Take and process repeat readings	Take repeat readings when appropriate

Recording Evidence

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
With prompting, suggest how findings could be recorded	Record and communicate their findings in a range of ways and begin to use simple scientific language	Record findings in various ways	Record findings using simple scientific language, drawings and labelled diagrams	Record data and results	Record data and results of increasing complexity using scientific diagrams and labels
		With prompting, suggest how findings may be tabulated	Record findings using keys, bar charts, and tables	Record data using labelled diagrams, keys, tables and charts	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar charts
		With prompting, use various ways of recording, grouping and displaying evidence	Gather, record, classify and present data in a variety of ways to help to answer questions	Use line graphs to record data	Record data and results of increasing complexity using line graphs

Reporting Findings

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Recognise findings	Identify and classify	With prompting, suggest conclusions from enquiries	Report on findings from enquiries, including oral and written explanations, of results and conclusions	Report and present findings from enquiries, including conclusions and, with prompting, suggest causal relationships	Report and present findings from enquiries, including conclusions and causal relationships
		Suggest how findings could be reported	Report on findings from enquiries using displays or presentations	With support, present findings from enquiries orally and in writing	Report and presents findings from enquiries in oral and written forms such as displays and other presentation
				With prompting, identify that not all results may be trustworthy	Report and present findings from enquiries, including explanations of, and degree of, trust in results

Conclusions and Predictions

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Gather and record data	Gather and record data to help answer questions	Gather and record data about similarities, differences and changes	Identify differences, similarities or changes related to simple scientific ideas and processes	Suggest how evidence can support conclusions	Identify scientific evidence that has been used to support or refute ideas or arguments
Use observations to suggest answers to questions	Use their observations and ideas to suggest answers to questions	With prompting, suggest conclusions that can be drawn from data	Use straightforward scientific evidence to answer questions or to support their findings	Suggest further comparative or fair tests	Use test results to make predictions to set up further comparative and fair tests
		Suggest possible improvements or further questions to investigate	Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions		