St Joseph's Catholic Primary School

St. Alban
Catholic Schools' Partnership

Knowledge and Skills – Progression Ladder

Subject: Science (Working Scientifically) Years: 1-6							
YEAR GROUP	**EYFS**	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**YEAR 5**	**YEAR 6**
Asking questions and recognising that they can be answered in different ways		• Asking simple questions and recognising that they can be answered in different ways.	• Asking simple questions and recognising that they can be answered in different ways.	• Asking relevant questions and using different types of scientific enquiries to answer them.	• Asking relevant questions and using different types of scientific enquiries to answer them.	• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
Making observations and taking measurements	• Learn new vocabulary with particular reference to scientific topics and enquiry skills e.g. problem, question, sunlight, sunset, plant, bud, baby etc.	• Observing closely, using simple equipment.	• Observing closely, using simple equipment.	• Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	• 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 precision, taking repeat readings when appropriate.	• Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
Engaging in practical enquiry to	• Ask questions to find out more and to check what has been said to them. • Make comments about what they have heard and ask	• Performing simple tests.	• Performing simple tests.	• Setting up simple practical enquiries, comparative and fair tests.	• Setting up simple practical enquiries, comparative and fair tests.	• Planning different types of scientific enquiries to answer questions, including recognising and	• Planning different types of scientific enquiries to answer questions, including recognising and

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answer questions	questions to clarify their understanding. • Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to work out problems and organise thinking and activities. Explain how things work and why they might happen. • Use new vocabulary in different contexts.					controlling variables where necessary.	controlling.variables where necessary
Recording and presenting evidence		• Gathering and recording data to help in answering questions.	• Gathering and recording data to help in answering questions.	• 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.	• 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 of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.	• Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
Answering questions and concluding		• Using their observations and ideas to suggest	• Using their observations and ideas to suggest	• Using straightforward scientific evidence to answer	• Using straightforward scientific evidence to answer	• Identifying scientific evidence that has been used to support or	• Identifying scientific evidence that has been used to support or

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		answers to questions.	answers to questions.	questions or to support their findings. • Identifying differences, similarities or changes related to simple scientific ideas and processes. • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	questions or to support their findings. • Identifying differences, similarities or changes related to simple scientific ideas and processes. • Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	refute ideas or arguments. • 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.	refute ideas or arguments. • 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.
Evaluating and raising further questions and predictions				• Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • Using results to draw simple conclusions, make predictions for new	• Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. • Using results to draw simple conclusions, make predictions for new	• Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written	• 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

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			values, suggest improvements and raise further questions.	values, suggest improvements and raise further questions.	forms such as displays and other presentations. • Using test results to make predictions to set up further comparative and fair tests.	other presentations. • Using test results to make predictions to set up further comparative and fair tests.
Communicating their findings			• Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	• Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	• 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.	• 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.