Science Progression of Working Scientifically Skills – Curriculum Map 2023 – 2025

EYFS – Characteristics of a Scientist

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ask Questions	Ask questions to find out more. Makes attempts to solve problems Make links between ideas Children concentrate and keep on trying if they encounter difficulties.	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.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plan	Explore and test own ideas Develop strategies for doing things. Children have and develop their own ideas	• 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. • Set up simple practical enquiries, comparative and fair tests.	• Make predictions based on scientific knowledge. • With support, plan different types of scientific enquiry. Where appropriate, identify the dependent, independent and controlled variables.	• Make predictions based on scientific knowledge. • Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Make Observations	Children investigate and experience things Shows curiosity using their senses Notices similarities, difference and changes Make observations using simple equipment Observe and suggest an answer to a question,	• 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.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
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.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Gather, Record and Classify Data	Identify, sort and group	• Gather and record simple data. • Sort objects and living things into groups based on	• Gather and record data to help in answering questions. • Identifying and	• Gather and record data in different ways to help answer questions.	• Gather, record and classify data in a variety of ways to help in answering questions.	• Gather, record and classify data with increasing complexity to help in answering	• Record data and results of increasing complexity using scientific diagrams and labels,

		simple properties.	classifying.	• Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables.	• Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	questions. • Record data using scientific diagrams and labels, classification keys, tables, bar and line graphs.	classification keys, tables, scatter graphs, bar and line graphs.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Present Findings	Collect simple information and mark make.	• 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.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Answer questions and make conclusions.	Talk about what they have done and found out. Enjoy achievements	• 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.	• Use scientific evidence to answer questions. • Make conclusions based on scientific evidence and from their own testing and findings. • Identify differences, similarities or	• 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.

					• Begin to identify differences, similarities or changes related to simple ideas or processes.	changes related to simple ideas or processes.	

	Year 3	Year 4	Year 5	Year 6
Evaluate	• 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.