

Working Scientifically- Curriculum Map

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Ask questions	<ul style="list-style-type: none"> Ask simple questions. 	<ul style="list-style-type: none"> Ask simple questions and recognise that they can be answered in different ways. 	<ul style="list-style-type: none"> Ask questions and understand there are different enquiry types they could use to answer them. 	<ul style="list-style-type: none"> Ask relevant questions and use different types of scientific enquiry to answer them. 	<ul style="list-style-type: none"> Ask scientific questions and begin to understand which questions would be best suited to each enquiry type. 	<ul style="list-style-type: none"> Ask relevant scientific questions and choose which enquiry type would be best suited to answer them.
Plan	<ul style="list-style-type: none"> Verbally state what they are going to investigate. 	<ul style="list-style-type: none"> Make simple predictions based on a question. Identify what they will change and keep the same. 	<ul style="list-style-type: none"> Make relevant predictions. Identify what they will change, observe and keep the same. With support, set up simple practical enquiries. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Make predictions based on scientific knowledge. With support, plan different types of scientific enquiry. Where appropriate, identify the dependent, independent and controlled variables. 	<ul style="list-style-type: none"> Make predictions based on scientific knowledge. Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
Make observations	<ul style="list-style-type: none"> Observe closely. 	<ul style="list-style-type: none"> Observe closely, using simple equipment. 	<ul style="list-style-type: none"> Begin to use scientific equipment to make observations. 	<ul style="list-style-type: none"> Make systematic and careful observations. 	<ul style="list-style-type: none"> Use a range of scientific equipment to make systematic and careful observations. 	<ul style="list-style-type: none"> Use a range of scientific equipment to make systematic and careful observations with increased complexity.
Take measurements	<ul style="list-style-type: none"> Carry out simple tests using nonstandard measurements when appropriate. 	<ul style="list-style-type: none"> Perform simple tests using standard units when appropriate. 	<ul style="list-style-type: none"> Carry out tests and simple experiments and take measurements using standard units. 	<ul style="list-style-type: none"> Take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. 	<ul style="list-style-type: none"> Take accurate measurements using a range of scientific equipment. Start to take repeat readings when appropriate. 	<ul style="list-style-type: none"> Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Gather, record and classify data	<ul style="list-style-type: none"> • Gather and record simple data. • Sort objects and living things into groups based on simple properties. 	<ul style="list-style-type: none"> • Gather and record data to help in answering questions. • Identifying and classifying. 	<ul style="list-style-type: none"> • Gather and record data in different ways to help answer questions. • Recording findings using simple scientific language, drawings, labelled diagrams, bar charts, and tables. 	<ul style="list-style-type: none"> • Gather, record and classify data in a variety of ways to help in answering questions. • Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables. 	<ul style="list-style-type: none"> • Gather, record and classify data with increasing complexity to help in answering questions. • Record data using scientific diagrams and labels, classification keys, tables, bar and line graphs. 	<ul style="list-style-type: none"> • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
Present findings	<ul style="list-style-type: none"> • Explain what they found out to an adult or a partner. 	<ul style="list-style-type: none"> • Talk about what they have found out and how they found it out. (non-statutory) 	<ul style="list-style-type: none"> • Report on findings from enquiries, including oral and written explanations. 	<ul style="list-style-type: none"> • Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. 	<ul style="list-style-type: none"> • Report and present findings from enquiries, including conclusions. • Begin to identify causal relationships in oral and written forms such as displays and other presentations. 	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Answer simple questions. 	<ul style="list-style-type: none"> • Use their observations and ideas to suggest answers to questions. 	<ul style="list-style-type: none"> • Make simple conclusions. • Use results, findings or observations to answer questions. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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 or processes. 	<ul style="list-style-type: none"> • 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			<ul style="list-style-type: none"> • Suggest questions for further investigation. 	<ul style="list-style-type: none"> • Begin to make predictions for new values, suggest improvements and raise further questions. 	<ul style="list-style-type: none"> • Make predictions for new values, suggest improvements and raise further questions. 	<ul style="list-style-type: none"> • 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.
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