

LKS2

	Planning		Doing		Reviewing/Concluding		
NC WS Strand	Asking relevant questions and using different types of scientific enquiries to answer them	Setting up simple practical enquiries, comparative and fair tests	Making systematic and careful observations and where appropriate, taking accurate measurement using standard units, using a range of equipment, including thermometers and data loggers	Gathering, recording, classifying and presenting data in a variety of ways to help answering questions Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	Identifying differences, similarities or changes related to simple scientific ideas and processes Using straightforward scientific evidence to answer questions or to support their findings	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
Skills	Raise their own relevant questions about the world around them Start to think make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations	Set up simple practical enquiries, comparative and fair tests Recognise when a simple fair test is necessary and help to decide how to set it up	Make systematic and careful observations. Help to make decisions about what observations to make, how long to make them for and the type of simple equipment that might be used Take accurate measurements using standard units. Learn how to use a range of equipment, such as data loggers/thermometers appropriately	Collect and record data from their own observations and measurements in a variety of ways: notes, bar charts and tables, standard units, drawings, labelled diagrams, keys and help to make decisions about how to analyse this data Talk about criteria for grouping, sorting and classifying; and using simple keys	With help, pupils should look for changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions	Use relevant simple scientific language to discuss their ideas and communicate their findings in ways that are appropriate for different audience, displays or presentations of results and conclusions	With support, they should identify new questions arising from the data, making predictions for new values within or beyond the data they have collected and finding ways of improving what they have already done Being to look for naturally occurring changes, patterns, similarities and differences in their data in order to draw simple conclusions and answer questions

UKS2

	Planning	Doing		Reviewing/Concluding		
NC WS Strand	Planning different types of scientific enquiries to answer questions; including recognising and controlling variables where necessary	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings where appropriate	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Identifying scientific evidence that has been used to support or refute ideas of arguments	Reporting and presenting findings from enquiries, including relationships and explanations of an degree of trust in results, in oral and written forms such as displays and other presentations	Using test results to make predictions to set up further comparative and fair tests.
Skills	Use their science experiences to explore ideas and raise different kinds of questions Talk about how scientific ideas have developed over time Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why	Make their own decisions about what observations to make, what measurements to use and how long to make them for Choose the most appropriate equipment to make measurements with increasing precision and explain how to use it accurately. Take repeat measurements where necessary	Decide how to record data and results of increasing complexity from a choice of familiar approaches: scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Use and develop keys and other information records to identify, classify and describe living things and materials, and identify patterns that might be found in the natural element	Identify scientific evidence that has been used to support or refute ideas or arguments	Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas, use oral and written forms such as displays and other presentations to report conclusions, casual relationships and explanations of degree of trust in results	Use their results to make predictions and identify when further observations, comparative and fair tests might be needed Look for different casual relationships in their data and identify evidence that refutes or supports ideas