Progression of Disciplinary Skills (Working Scientifically)

This document show how the disciplinary skills statements from the National Curriculum are linked and built upon across the phases. To highlight the links, the disciplinary skills statements are grouped under the following broader skills definitions.

Asking questions and recognising that they can be answered in different ways	Making observations and taking measurements	Engaging in practical enquiry and performing/ setting up tests	Recording and presenting data/evidence	Answering questions, concluding and evaluating	Making predictions and asking further questions	Interpreting and communicating findings
EYFS Show curiosity and ask questions **Year 1 & 2** Asking simple questions and recognising that they can be answered in different ways **Year 3 & 4** Asking relevant questions and using different types of scientific enquiries to answer them	**EYFS** Make observations using their senses and simple equipment **Year 1 & 2** Observing closely, using simple equipment **Year 3 & 4** Making systematic and careful observations and, where appropriate, taking accurate measurements	**EYFS** Make direct comparisons Identify, sort and group **Year 1 & 2** Performing simple tests Identifying and classifying **Year 3 & 4** Setting up simple practical enquiries, comparative and fair tests	**EYFS** Record their observations by drawing, taking photographs, using sorting rings or boxes and, in Reception, on simple tick sheets **Year 1 & 2** Gathering and recording data to help in answering questions **Year 3 & 4**	**EYFS** Use their observations to help them in answer their questions. Talk about what they have done and found out . **Year 1 & 2** Using their observations and ideas to suggest answers to questions **Year 3 & 4** Using results to draw simple conclusions,	**Year 3 & 4** Using results to make predictions for new values, suggest improvements and raise further questions **Year 5 & 6** Reporting and presenting findings from enquiries, including conclusions, causal relationships and	**Year 3 & 4** Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions **Year 5 & 6** Reporting and presenting findings from enquiries, including

Year 5 & 6 Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	using standard units, using a range of equipment, including thermometers and data loggers **Year 5 & 6** Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	**Year 5 & 6** Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary	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 **Year 5 & 6** Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Using straightforward scientific evidence to answer questions or to support their findings Identifying differences, similarities or changes related to simple scientific ideas and processes **Year 5 & 6** Identifying scientific evidence that has been used to support or 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	explanations of and 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	conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations