

**Primary School**  
Progression in Working Scientifically skills 2019- 20

Working Scientifically	Year 1 /2	Year 1/2	Year 3/4	Year 3/4	Year 5/6	Year 6
Making predictions/ scientific enquiry	Ask simple questions and recognising that they can be answered in different ways.		Make decisions, asking relevant questions and using different types of scientific enquiries to answer them		Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.	
Observing and measuring	Observe closely, using simple equipment and measurement. e.g. hand lenses, egg timers		Make systematic and careful observations using notes and simple tables Take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.		Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate. Range of equipment- stopwatch, scales, spring balance etc.	
Comparative/ Fair testing/ investigating/ exploring	Perform simple tests		Set up simple practical enquiries, comparative and fair tests		Use test results to make predictions to set up further comparative and fair tests	
Seeking answers/ collecting/ analysing/ presenting data	Sorting circles, photographs, pictograms and pictures to illustrate.		Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions		Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs Recognise that scientific ideas change and develop over time.	
Identifying/classifying/ grouping	Identifying and classifying		Identify differences, patterns, similarities or changes related to simple scientific ideas and processes		Identify differences, similarities or changes relate to scientific ideas and processes. Classification tables	
Reporting			Report on findings from enquiries, using relevant scientific language, 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	
Draw conclusions	Use their observations and ideas to suggest answers to questions		Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions		Draw conclusions based on their data and observations, use evidence to justify their ideas, and use their scientific knowledge and understanding to explain their findings.	
Evidence/ Data/ Results	Gathering, recording and communicating data and findings to help in answering questions.		Use straightforward scientific evidence to answer questions or to support their findings. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables		Identify scientific evidence that has been used to support or refute ideas or arguments.	

