Working Scientifically Progression
St Edward's Catholic Primary School

	Plan		Do			Review	
	Ask Qs + Predict	**Plan enquiry**	**Set up enquiry**	**Observe + Measure**	**Sort + Record**	**Interpret + Record**	**Evaluate**
KS1 ***Develop close observation***	Ask simple questions. *Begin to predict.*	Recognise that Qs can be answered in diff ways	Perform simple tests.	Observe closely, using simple equipment	Identify and classify. Gather and record data to help in answering questions.	*Communicate what they found out using simple scientific language.*	Use their observations and ideas to suggest answers to questions.
Lower KS2 ***Develop systematic approach***	Ask relevant questions. *Make predictions, using previous experience.*	Use different types of scientific enquiries to answer questions.	Set up simple practical enquiries, comparative and fair tests.	Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	Gather, record, classify and present 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.	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Identify differences, similarities or changes related to simple scientific ideas and processes.	Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Use straightforward scientific evidence to answer questions or to support their findings.
Upper KS2 ***Develop independence***	*Ask testable questions. Base predictions on scientific understanding.*	Plan different types of scientific enquiries.	Recognise and control variables where necessary.	Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	Report and present findings from enquiries, inc conclusions and causal relationships, in oral and written forms such as displays and other presentations, using appropriate scientific language.	Use test results to make predictions to set up further comparative and fair tests. Identify and evaluate scientific evidence (their own and others') that has been used to support or refute ideas or arguments