## Year 5 Science Knowledge Organiser - Working Scientifically

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.

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables an bar and line graphs.

Using test results to make predictions to set up further comparative and fair tests.

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations.

Identifying scientific evidence that has been used to support or refute ideas or arguments.

Use the Glossary to help you:

<u>Word</u>	<u>Definition</u>
Causal Relationships	A causal relationship exists when one variable in a data set has a direct influence on another variable.
Classifying	An investigative approach that involves sorting objects or events into groups or categories.
Comparative	An investigative approach that requires you to compare different cases and situations.
Conclusion	This sums up what has been found out during an investigation.
Enquiry	The process of investigation that improves knowledge, resolves doubt or solves a problem.
Evidence	A collection of facts of information that suggests whether something is true or false.
Fair Test	A method of testing which makes sure that the data collected can be compared fairly.
Predictions	Making a statement of what you think is going to happen.
Variable	Any one of the elements of a test which could be changed.

To help with these working scientifically statements we have made them into I can statements that should help

- I can plan in a scientific way,
- I can display and present evidence and findings.
- I can work with precision and accuracy.
- I can repeat an investigation to check readings.
- I can record data using scientific diagrams, labels, classification, keys, tables, scatter graphs, bar and line graphs.
- I can make predictions.
- I can carry out further comparative and fair tests.
- I can report and present data while making reference to conclusions, causal relationships, explanations and degree of trust.
- I can present using oral and written forms.
- I can use evidence to support/refute ideas or arguments.
- I can identify, classify and describe.
- I can identify patterns.
- I can work in a systematic way.
- I can use quantitative measurements.