Year 5 Working scientifically

Prior and future learning

Prior Knowledge…	What's next?
• Develop relevant, testable questions. • Plan investigations using different types of scientific enquiry. • Set up comparative and fair tests. • Use various equipment, as instructed, repeatedly and with care. • Recognise the importance of using standard units and measures accurately. • Use words and diagrams to record findings. • Use various ways to record evidence. • Use various ways to record, group and display evidence, • Write a conclusion based on evidence.. • Present findings either in writing or orally. • Recognise patterns that relate to scientific ideas. • Use evidence to produce a simple conclusion. • Use evidence to suggest further relevant investigations.	• Answer questions using evidence gathered from different types of scientific enquiry. • Identify and manage variables. • Use appropriate equipment. • Consider how by modifying instrument or technique, measurements can be improved. • Identify situations in which taking repeat readings will improve the quality of evidence. • Use labelled diagrams to show complex outcomes • Use various ways, as appropriate, to record complex evidence • Use line graphs to display complex data • Write a conclusion using evidence and identifying causal links. • Display and present key findings from enquiries orally and in writing • In conclusions, indicate how trustworthy they are. • Identify how an idea is supported or refuted by evidence, • Use evidence to suggest further comparative or fair tests that would develop the investigation.

Track your learning

Skill	How I will show what I've learned	☹	😐	☺
Plan	I can, with support, answer questions using evidence gathered from different types of scientific enquiry.			
	I can, with prompting, identify and manages variables.			
Do	I can, following discussion of alternatives, select appropriate equipment.			
	I can take measurements that are precise as well as accurate.			
	I can know how to process repeat readings.			
Record	I can start to use labelled diagrams to show more complex outcomes.			
	I can, with prompting, use various ways to record complex evidence.			
	I can use a line graph to record basic data.			
Report	I can, with prompting, write a conclusion using evidence and identifying causal links.			
	I can, with support, display and present key findings from enquiries orally and in writing.			
	I can, with support, indicate why some results may not be entirely trustworthy			
Review	I can show how evidence supports a conclusion.			
	I can suggest further relevant comparative or fair tests.			

CAPTAIN PEEKO — Spotting patterns everywhere! — Pattern seeking

BILLY BOOKHEAD — He's got all the facts! — Research using secondary sources

SUPERGIRL — Making sure all's fair and right! — Comparative and fair testing

SPY MAGNUS — Watching near and far! — Observing over time

COMMANDER CLASSIFY — Identifying, classifying and grouping

Vocabulary	
Classify	To arrange things in categories according to shared characteristics or properties.
Research	To investigate to discover facts about a topic.
Conclusion	To summarize the main points of an experiment.
Identify	To establish what something is.
Compare	To draw an analogy between one thing and (another) for the purposes of explanation or clarification.
Contrast	To show how something is different in a science experiment.
Biology	The study of living organisms.
Chemistry	The study of chemicals and substances and what they're made up of.
Physics	The study of properties of matter and energy.
Prediction	To have an educated guess as to what may happen in an experiment.
Interpret	To understand something in a specified way.
Data	A collection of information.
Evidence	A sign that shows something is true.
Fair test	A test which controls all but one variable.
Systematic	To use a system or regular orderly method.
Construct	To create something e.g. a graph
Accurate	Free from error as a result of taking care.
Variables	Something that is changed in an experiment.
Line graphs	A graph which is used to show changes over time and consists of a line.