

Whole School - Yearly Overview 2022-2023

<u>Year Group</u>	<u>Autumn 1</u>	<u>Autumn 2</u>		<u>Spring 1</u>	<u>Spring 2</u> SCIENCE WEEK	<u>Summer 1</u>	<u>Summer 2</u>
1	Everyday Materials			Animals Including Humans		Plants	
	Seasonal Changes						
2	Everyday Materials			Animals Including Humans	Living things and Their Habitats	Plants	
3	Light	Forces and Magnets	S T E M C H A L L E N G E	Animals Including Humans (nutrition)	Animals Including Humans (skeleton)	Rocks	Plants
4	States of Matter			Electricity	Sound	Animals Including Humans	Living Things and Their Habitats
5	Earth and Space	Forces		Animals Including Humans	Living things and Their Habitats	Properties and Changes of Materials	Consolidation
6	Light	Animals Including Humans		Living Things and Their Habitats	Evolution and Inheritance	Electricity	Consolidation

Expectations for Scientific Enquiry

National Curriculum

<h3>Biology</h3> <p>Plants, living things, habitats, human body, health</p>	<h3>Chemistry</h3> <p>Materials, changes, rocks and soils, states of matter</p>	<h3>Physics</h3> <p>Electricity, light, forces, earth and space, magnets, sound</p>
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Working Scientifically

Carrying out scientific enquiry through:

Ask Qs and plan enquiry	Set up enquiry	Observe + Measure	Record	Interpret + Report	Evaluate
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What is Scientific Enquiry?

5 Science Enquiry Types



We need to plan and deliver lessons that cover all types of enquiry throughout the year within our topics. Each lesson should have one of these types in it so it can reinforce the knowledge and not stand alone.

SEERIH Innovations (seerih-innovations.org)

Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
<p>During years 1 and 2, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> asking simple questions and recognising that they can be answered in different ways observing closely, using simple equipment performing simple tests identifying and classifying using their observations and ideas to 	<p>During years 3 and 4, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> asking relevant questions and using different types of scientific enquiries to answer them setting up simple practical enquiries, comparative and fair tests making systematic and careful observations 	<p>During years 5 and 6, pupils should be taught to use the following practical scientific methods, processes and skills through the teaching of the programme of study content:</p> <ul style="list-style-type: none"> 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

<p>suggest answers to questions</p> <ul style="list-style-type: none"> ● gathering and recording data to help in answering questions 	<p>and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers</p> <ul style="list-style-type: none"> ● 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 ● reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ● using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions ● identifying differences, similarities or changes related to simple scientific ideas and processes ● using straightforward scientific evidence to answer questions or to support their findings. 	<p>accuracy and precision, taking repeat readings when appropriate</p> <ul style="list-style-type: none"> ● recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, 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 and a degree of trust in 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 argument.
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