

Working Scientifically Map

Year 5 programme of study

Working scientifically

Statutory requirements

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:

- 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, taking repeat readings when appropriate
- 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 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 arguments.

Year Group: 5

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
TOPICS	Living Things and Their Habitats Pond in Autumn	Forces	Materials Pond in Winter	Earth and Space Pond in Spring		SRE Pond in Summer
Types of Enquiry						
Observing (changes) over time	✓ Pond changes Looking at an animal/plant lifecycle	✓ Observing air resistance in action with a paper spinner	✓ Pond changes	✓ Pond changes		✓ Pond across the seasons
Seeking patterns and relationships	✓ Comparing life cycles	✓ Observing air resistance in action with a paper spinners		*		*

Identifying / grouping /Classifying	✓ Recording types of animal groups		*	*		
Comparative and fair testing		✓ Observing air resistance in action with a paper spinners	*	*		
Researching Using Secondary Sources	* Using computers to compare life cycles		*	*		*
SKILLS						
Asking questions		✓ Observing air resistance in action with a paper spinners- does adding paper clips affect the speed of the fall?	*	*		*
Observing / measuring	✓ Observe pond in autumn	✓ Measuring rate of paper spinners falling	*	*		*
Planning / designing enquiries			*	*		
Carrying out tests		✓ Observing air resistance in action with paper spinners	*	*		
Identifying/ grouping / classifying	✓ Identify using the pond key		*	*		
Gathering / recording data and info	✓ Record data from the pond	✓ Observing air resistance in action with a paper spinners	*	*		
Using equipment	✓ Pond equipment	✓ Timers	✓ Pond equipment	✓ Pond equipment		✓ Pond equipment

Reporting / communicating	✓ Report on the pond dip Types of animal posters		*	*		
Evaluating Learning	Picture writing- before and after. KWL for pond	True/false/don't know tick list	Thought shower- What do you know about materials?	Picture Prompt		Diagram