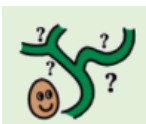


Scientific enquiry progression of skills



'Working scientifically' statements are adapted from the National curriculum statements and the PLAN working scientifically statements. The statements are split into 8 PLAN working scientifically statements which can be found on the pathway Medium term plan's. The working scientifically skills can be found on the PLAN matrices which support the teaching of scientific enquiry. Cedar and Maple pathways are mostly working below the National Curriculum age so focus on engagement skills.



EYFS - Cedar pathway

Assessment class - Early steps



Ladybird and Dragonfly

Explore how things work

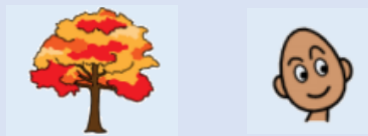
Explore the world around us

To observe

Watch simple tests being carried out

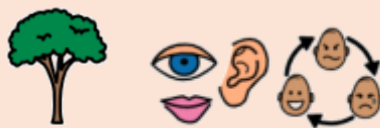
To take risks

Maple pathway



Engagement Steps (Squirrel
+ Progression Steps as
appropriate)

Elm pathway



Communication / Emotional
regulation focus (SCERTS)

Willow pathway



Creative curriculum (Topic)

Oak pathway







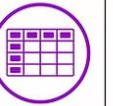



Subject specific curriculum

	Engagement focus Individual SCERTS			
KS1	Grasshopper Investigate Notice Experience Explore	Butterfly Show curiosity about objects and people Test out ideas Group and identify Observe	Caterpillar & Bumblebee Observe closely Perform and watch simple tests Identify and classify Record through photographs and sorting rings	2025 class
KS2	Rose Show curiosity Take risks Use trial and error Group and sequence	Daisy Comment on aspects of their familiar world Engage in new experiences through trial and error Solve problems through exploring Closely observe	Poppy & Bluebell Use observations and ideas to suggest answers to questions Talk about what they have found out Observe closely using simple equipment with help Use simple features to compare objects, materials and living things and decide how to sort and group them	Sunflower & Daffodil Groups using complex and varied features Begins to use units to measure and equipment to observe/carry out tests Record data from their observations Sets up scientific tests and compares results
KS3	Squirrel Observe Notice patterns Make links See changes	Dormouse Experience different types of science enquiries including practical activities Carry out simple tests Observe changes over time	Hedgehog, Deer & Otter Use their observations and ideas to suggest answers to questions To perform simple tests	Rabbit, Fox & Badger Groups using their own criteria Uses comparative and fair testing producing graphs and tables of results

		Record simple findings	To identify and classify Talk about what they see using a range of vocabulary	Chooses the correct equipment and units of measure to record Observes over time, commenting and asking questions
KS4	2025 class	2025 class	Robin & Owl Use a wide range of vocabulary to talk about observations Record using photographs, drawings and diagrams To explain what they have found out Carry out tests	Woodpecker & Hawk Asks relevant questions Plan scientific enquiries to answer questions Sets up comparative and fair tests Makes careful observations where appropriate taking accurate measurements (units)
KS5	Woolston 6th form	Woolston 6th form	Woolston 6th form / Various colleges	Various colleges

**see the PLAN scientific enquiry matrixes for support with teaching and planning enquiry into lessons*

Year-group	Asking questions	Planning an enquiry	Making predictions	Gathering data	Recording data	Presenting data	Drawing conclusions	Evaluating an enquiry
<u>Year 1</u>	<u>Asking questions</u>			<u>Gathering data</u>	<u>Recording data</u>		<u>Drawing conclusions</u>	
Year 2	Asking questions			Gathering data	Recording data		Drawing conclusions	
<u>Year 3</u>	<u>Asking questions</u>	<u>Planning an enquiry</u>	<u>Making predictions</u>	<u>Gathering data</u>	<u>Recording data</u>	<u>Presenting data</u>	<u>Drawing conclusions</u>	<u>Evaluating an enquiry</u>
Year 4	Asking questions	Planning an enquiry	Making predictions	Gathering data	Recording data	Presenting data	Drawing conclusions	Evaluating an enquiry
<u>Year 5</u>	<u>Asking questions</u>	<u>Planning an enquiry</u>	<u>Making predictions</u>	<u>Gathering data</u>	<u>Recording data</u>	<u>Presenting data</u>	<u>Drawing conclusions</u>	<u>Evaluating an enquiry</u>
Year 6	Asking questions	Planning an enquiry	Making predictions	Gathering data	Recording data	Presenting data	Drawing conclusions	Evaluating an enquiry

PLAN	Asking questions	Planning an enquiry	Making predictions	Gathering data	Recording data	Presenting data	Drawing conclusions	Evaluating an enquiry
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PSTT	Asking questions	Setting up tests	Making predictions	Observing & measuring	Recording data		Interpreting & communicating results	Evaluating
TAPS	Asking questions & plan enquiry	Set up & predict		Observe & measure	Record		Interpret & report	Evaluate