

## **BURRADON COMMUNITY PRIMARY SCHOOL**

*Science progression of working scientifically skills and vocabulary EYFS-Year 6*

Working scientifically skills are to be explicitly taught alongside content and a scientific enquiry type

### Scientific enquiry types:

				
Identifying, classifying and grouping	Comparing and fair testing	Observing over time	Pattern seeking	Researching using secondary sources

### Working scientifically skills progression:

<b>EYFS</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3/4</b>	<b>Year 4/5</b>	<b>Year 6</b>
<p>Despite explicit skills not being taught, children will still be exposed to some vocabulary throughout their science learning. They will also be exposed to the various skills and enquiry types through the experiential learning.</p>	<b><u>Asking questions and recognising that they can be answered in different ways</u></b>				
	<ul style="list-style-type: none"> <li>-Ability to ask questions</li> <li>-Answering questions</li> <li>-Answering questions about a scenario</li> </ul>	<p>Same as year 1 but with greater independence</p>	<ul style="list-style-type: none"> <li>-Consider prior knowledge when asking questions</li> <li>-Using sentence stems</li> <li>-Answer questions posed by the teacher</li> <li>-How to gather evidence to answer a question</li> </ul>	<p>Year 5 the same as year 4 but with greater independence</p>	<ul style="list-style-type: none"> <li>-Independently answering questions</li> <li>-Using scientific evidence to answer questions</li> <li>-Using resources to decide how to gather evidence to answer a questions</li> </ul>
	<b><u>Making observations and taking measurements</u></b>				
	<ul style="list-style-type: none"> <li>-Make observations to identify, compare and notice change</li> <li>-Use the senses to aid in observations</li> </ul>	<p>Same as year 1 but with greater independence</p>	<ul style="list-style-type: none"> <li>-Make systematic and careful observations</li> <li>-Use a range of equipment for measuring length,</li> </ul>	<p>Year 5 the same as year 4 but with greater independence</p>	<ul style="list-style-type: none"> <li>-Selecting measuring equipment to give precise results e.g. ruler, tape measure, trundle wheel etc.</li> </ul>

	-Begin taking measurements by comparisons then non-standard units		time, temperature and capacity. -Using standard units of measure		-Make decisions about repeat readings, increase the sample size, adjusting the observation period and frequency to get accurate data
<b><u>Engaging in practical enquiry to answer questions</u></b>					
	-Use practical resources to gather evidence to answer questions. -Use observations to compare -Identify their own criteria -Use secondary sources	Same as year 1 but with greater independence	-Select from a range of practical resources to gather evidence to answer questions. -Follow their plan to carry out observations, tests to classify, comparative tests and pattern seeking	Year 5 the same as year 4 but with greater independence	-Select from a range of practical resources to gather evidence to answer questions. -Carry out fair tests and controlling variables. -Decide what observations or measurements to make over time and how long for.
<b><u>Recording and presenting evidence</u></b>					
	-Record observations e.g. photographs, videos, drawings, labelled diagrams -Record measurements e.g. tables, pictograms,	Same as year 1 but with greater independence	-Sometimes decide how to record and present data. -Record observations e.g. photographs, videos, labelled diagrams.	Year 5 the same as year 4 but with greater independence	-Decide how to record or present evidence. -Present the same data in different ways in order to help with answering a question.

	tally charts, block charts. -Classify using simple tables and sorting rings.		-Supported to present the same data in different ways to help answering a question.		
<b><u>Concluding and answering questions</u></b>					
	-Supported to relate evidence -Recognise 'biggest' and 'smallest' from their data.	Same as year 1 but with greater independence	-Answer their own and others' questions based on observations. -Interpret data to generate simple comparative statements based on evidence -Draw conclusions based on their evidence.	Year 5 the same as year 4 but with greater independence	-In conclusions, children identify relationships and patterns, identify results that don't fit a pattern and explain their findings.
<b><u>Evaluate and raise further questions and predictions</u></b>					
	Not applicable		-Identify ways to adapt methods. -Use evidence to suggest values for different items tested -Ask further questions which can be answered.	Year 5 the same as year 4 but with greater independence	-Evaluate the choice of method, precision and accuracy of secondary sources used. -Identify limitations that reduce the trust in data. -Use scientific knowledge to make

						predictions they can investigate.
<b>Working scientifically vocabulary</b>						
<u>EYFS</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Year 6</u>
Question, answer, find, learn, curious, look, feel, touch, taste, sight, tools, tall, small, long, short, measure, test, drawing, photograph, sort, talk, share	All for EYFS and: same, different, change, explore, observe, identify, compare, senses, equipment, findings, classify, patterns, record, diagram, table, measurement, experience, think, results	All for year 1 and: Similar, difference, data, predict, conclude	All for EYFS, year 1, 2 and: evidence, sources, practical, enquiry, systematic, careful, length, time, temperature, capacity, plan, present, keys, interpret, comparative, relationships, values, improvement, value, method, repeat, explanation, communicate, audience	All for EYFS, year 1, 2,3 and: Prior knowledge, secondary sources, accurate	All for EYFS, year 1, 2, 3, 4 and: Experience, justify, accuracy, decisions, sample, observation, frequency, recognising, controlling, variables, scatter graphs, line graphs, trust, presentation, limitations, illustration	All for EYFS, year 1, 2, 3, 4, 5 and: Sample size precision, classification, observation period, Carroll diagrams