

	Working Scientifically						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Comparative and Fair Test	<p>Can I talk about what I have done?</p> <p>Can I talk about what I have found out?</p> <p>Can I talk about what I think might happen?</p> <p>Can I give a reason for my thoughts?</p>	<p>Can I perform a simple test.</p> <p>Can I tell other people about what they have done?</p> <p>Can I make a prediction about what will happen?</p>	<p>Can I perform a simple, fair test?</p> <p>Can I use prompts to find things out?</p> <p>Can I say whether things happened as they expected?</p> <p>Can I explain why it might not be fair to compare two things?</p> <p>Can I measure using simple equipment?</p>	<p>Can I use different ideas to suggest how to find something out?</p> <p>Can I plan a fair test and say why it is fair?</p> <p>Can I set up a simple fair test to make a comparison?</p> <p>Can I make and record a prediction before testing?</p> <p>Can I use a range of equipment (including a data-logger) in a simple test?</p> <p>Can I take accurate measurements using standard units?</p> <p>Can I suggest improvements and predictions for further tests?</p>	<p>Can I set up a simple fair test to make comparisons?</p> <p>Can I plan a fair test and isolate variables, explaining why it was fair and which variables have been isolated?</p> <p>Can I suggest improvements and make predictions?</p> <p>Can I take measurements using different equipment and units of measure?</p>	<p>Can I explore different ways to test an idea, choose the best way and give reasons?</p> <p>Can I use test results to make predictions to set up comparative and fair testing?</p> <p>Can I make a prediction with reasons?</p> <p>Can I take measurements using a range of scientific equipment with increasing accuracy and precision?</p> <p>Can I decide which units of measurement they need to use?</p>	<p>Can I plan and carry out an investigation by controlling variables fairly and accurately?</p> <p>Can I choose the best way to answer a question?</p> <p>Can I identify the key factors when planning a fair test?</p> <p>Can I explain why they have chosen specific equipment (including computer-based equipment)?</p>

Identifying, classifying and grouping	<p>Can I talk about what I observe?</p> <p>Can I sort objects into groups?</p> <p>Can I explain how I have grouped things?</p>	<p>Can I identify and classify things they observe?</p> <p>Can I think of some questions to ask?</p> <p>Can I answer some scientific questions?</p> <p>Can I give a simple reason for their answers?</p> <p>Can I explain what they have found out?</p>	<p>Can I organise things into groups?</p> <p>Can I compare and contrast several things?</p> <p>Can I identify animals and plants by specific criteria through asking questions e.g. does it lay eggs or not?</p> <p>Can I explain their decisions using scientific vocabulary?</p>	<p>Can I use simple characteristics to sort and classify things/objects?</p> <p>Can I explore similarities and differences?</p> <p>Can I compare and contrast to consider the relationship between different things?</p>	<p>Can I identify differences, similarities, or changes related to simple scientific ideas or processes?</p>	<p>Can I explain, in simple terms, a scientific idea and what evidence supports it?</p>	<p>Can I make a prediction which links with other scientific knowledge?</p> <p>Can I explain how a scientist has used their scientific understanding plus good ideas to have a breakthrough?</p> <p>Can I explain qualitative and quantitative data?</p>
Observing Over Time	<p>Can I talk about what I can see, hear, smell and feel around me?</p> <p>Can I talk about the changes that I can see?</p> <p>Can I make drawings of what I can see?</p> <p>Can I ask a question?</p>	<p>Can I talk about what they see, touch, smell, hear or taste?</p> <p>Can I ask a simple, scientific question?</p> <p>Can I use simple equipment to help them make observations?</p> <p>Can I say/explain what has changed?</p>	<p>Can I use sight, touch, smell, sound or taste to help them answer questions?</p> <p>Can I ask a question and answer it in more than one way?</p> <p>Can I observe and explain a simple process?</p> <p>Can I use some scientific words to describe what they have seen and measured?</p>	<p>Can I make systematic and careful observations?</p> <p>Can I suggest what observations to make?</p> <p>Can I suggest how long to make observations for?</p> <p>Can I explain how to improve their work / investigation if they did it again?</p>	<p>Can I decide which information needs to be collected and decide which is the best way for collecting it?</p> <p>Can I use their findings to draw a simple conclusion?</p>	<p>Can I and carry out a scientific enquiry to answer questions, including recognising and controlling variables where necessary?</p> <p>Can I vary one factor whilst keeping the others the same in an experiment?</p> <p>Can I take repeat readings when appropriate?</p> <p>Can I suggest how to improve their work and say why they think this?</p>	<p>Can I explain why they have varied one factors whilst keeping the others the same?</p> <p>Can I plan in advance which equipment they will need and use it well?</p> <p>Can I make precise measurements?</p> <p>Can I collect information in different ways?</p> <p>Can I record their measurements and observations systematically?</p>

Pattern Seeking	<p>Can I understand what a pattern might be?</p> <p>Can I talk about patterns that I see?</p> <p>(we introduce children to lots of different types of patterns – close link with maths, we teach them how to identify, make and describe repeating patterns and how to look for patterns around them in their immediate environment.</p>	<p>Can I recognise simple patterns (or associations) when they are illustrated to them?</p>	<p>Can I find simple patterns (or associations)?</p>	<p>Can I identify what data to collect to identify patterns and relationships?</p> <p>Can I explain what they have found out and use their measurements to say whether it helps to answer their question?</p> <p>Can I use their findings to draw a simple conclusion?</p>	<p>Can I find any patterns in their evidence or measurements?</p> <p>Can I make a prediction based on something they have found out?</p> <p>Can I identify differences, similarities, or changes related to simple scientific ideas or processes?</p>	<p>Can I find a pattern from their data and explain what it shows?</p> <p>Can I use a graph to answer scientific questions?</p> <p>Can I use information to help make a prediction?</p> <p>Can I explain why a measurement needs to be repeated?</p> <p>Can I link what they have found out to other science?</p>	<p>Can I identify scientific evidence that has been used to support or refute ideas or arguments?</p> <p>Can I draw conclusions from their work?</p> <p>Can I link their conclusions to other scientific knowledge?</p>
Research using Secondary Sources	<p>Children are introduced to the fact that they can find information from books, photos and objects.</p> <p>Can I make drawings of what I observe?</p>	<p>Can I use books, objects and photos to find things out?</p> <p>Can I show their work using pictures, labels and captions?</p> <p>Can I record their findings using standard units?</p>	<p>Can I use information from books and online information to find things out?</p> <p>Can I use text, diagrams, pictures, charts and tables to record their findings?</p>	<p>Can I explain why they need to collect or research information to answer a question?</p> <p>Can I record their observations in different ways e.g. labelled diagrams, charts etc.?</p> <p>Can I record and present what they have found out using scientific language, drawings, labelled diagrams, bar charts and tables?</p>	<p>Can I use straightforward scientific evidence to answer questions or to support their findings?</p> <p>Can I record what they have found in a range of ways?</p> <p>Can I evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?</p> <p>Can I describe and explain their findings in different ways</p>	<p>Can I present a report of their findings through writing, display and presentation?</p> <p>Can I record more complex data and results using scientific diagrams, labels, classification keys, tables, scatter, bar and line graphs?</p> <p>Can I report and present findings from enquiries through written explanations and conclusions?</p>	<p>Can I record their findings in different ways (including bar charts, tables and line graphs)?</p> <p>Can I use information from different sources to answer a question and plan an investigation?</p> <p>Can I report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as</p>

				Can I describe and explain their findings in different ways (display, presentation or writing)?	(display, presentation or writing) using scientific vocabulary?		displays and other presentations?
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