

**SCIENCE SKILLS PROGRESSION**  
WORKING SCIENTIFICALLY



Planning					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>Can they perform a simple test?</li> <li>Can they tell other people about what they have done?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they give a simple reason for their answers?</li> </ul>	<ul style="list-style-type: none"> <li>Can they carry out a simple fair test?</li> <li>Can they explain why it might not be fair to compare two things?</li> <li>Can they say whether things happened as they expected?</li> <li>Can they suggest how to find things out?</li> <li>Can they use prompts to find things out?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they say whether things happened as they expected and if not why not?</li> </ul>	<ul style="list-style-type: none"> <li>Can they use different ideas and suggest how to find something out?</li> <li>Can they make and record a prediction before testing?</li> <li>Can they plan a fair test and explain why it was fair?</li> <li>Can they set up a simple fair test to make comparisons?</li> <li>Can they explain why they need to collect information to answer a question?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they record and present what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?</li> </ul>	<ul style="list-style-type: none"> <li>Can they set up a simple fair test to make comparisons?</li> <li>Can they plan a fair test and isolate variables, explaining why it was fair and which variables have been isolated?</li> <li>Can they suggest improvements and predictions?</li> <li>Can they decide which information needs to be collected and decide which the best way for collecting it is?</li> <li>Can they use their findings to draw a simple conclusion?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they plan and carry out an investigation by controlling variables fairly and accurately?</li> <li>Can they use test results to make further predictions and set up further comparative tests?</li> </ul>	<ul style="list-style-type: none"> <li>Can they plan and carry out a scientific enquiry to answer questions, including recognising and controlling variables where necessary?</li> <li>Can they make a prediction with reasons?</li> <li>Can they use test results to make predictions to set up comparative and fair tests?</li> <li>Can they present a report of their findings through writing, display and presentation?</li> </ul> <p>GD:</p> <p>Can they explore different ways to test an idea, choose the best way and give reasons?</p> <ul style="list-style-type: none"> <li>Can they vary one factor whilst keeping the others the same in an experiment?</li> <li>Can they use information to help make a prediction?</li> <li>Can they explain, in simple terms, a</li> </ul>	<ul style="list-style-type: none"> <li>Can they explore different ways to test an idea, choose the best way, and give reasons?</li> <li>Can they vary one factor whilst keeping the others the same in an experiment? Can they explain why they do this?</li> <li>Can they plan and carry out an investigation by controlling variables fairly and accurately?</li> <li>Can they make a prediction with reasons?</li> <li>Can they use information to help make a prediction?</li> <li>Can they use test results to make further predictions and set up further comparative tests?</li> <li>Can they explain, in simple terms, a scientific idea and what evidence supports it?</li> <li>Can they present a report of their findings through writing, display and</li> </ul>

**SCIENCE SKILLS PROGRESSION**  
WORKING SCIENTIFICALLY



				scientific idea and what evidence supports it?	presentation? GD: <ul style="list-style-type: none"> <li>• Can they choose the best way to answer a question?</li> <li>• Can they use information from different sources to answer a question and plan an investigation?</li> <li>• Can they make a prediction which links with other scientific knowledge?</li> <li>• Can they identify the key factors when planning a fair test?</li> <li>• Can they explain how a scientist has used their scientific understanding plus good ideas to have a breakthrough?</li> </ul>
<b>Obtaining and Presenting Evidence</b>					
<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<ul style="list-style-type: none"> <li>• Can they talk about what they &lt;see, touch, smell, hear or taste&gt;?</li> <li>• Can they use simple equipment to help them make observations?</li> <li>• Can they show their</li> </ul>	<ul style="list-style-type: none"> <li>• Can they use &lt;see, touch, smell, hear or taste&gt; to help them answer questions?</li> <li>• Can they use some scientific words to describe what they have seen and measured?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they measure using different equipment and units of measure?</li> <li>• Can they record their observations in different ways? &lt;labelled diagrams, charts etc&gt;</li> </ul>	<ul style="list-style-type: none"> <li>• Can they take measurements using different equipment and units of measure and record what they have found in a range of ways?</li> <li>• Can they make accurate</li> </ul>	<ul style="list-style-type: none"> <li>• Can they take measurements using a range of scientific equipment with increasing accuracy and precision?</li> <li>• Can they take repeat readings when appropriate?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they explain why they have chosen specific equipment? (incl ICT based equipment)</li> <li>• Can they decide which units of measurement they need to use?</li> </ul>

**SCIENCE SKILLS PROGRESSION**  
**WORKING SCIENTIFICALLY**

<p>work using pictures, labels and captions?</p> <ul style="list-style-type: none"> <li>• Can they record their findings using standard units?</li> <li>• Can they put some information in a chart or table?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they find out by watching, listening, tasting, smelling and touching?</li> <li>• Can they use ICT to show their working?</li> <li>• Can they make accurate measurements?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they compare several things?</li> <li>• Can they use &lt;text, diagrams, pictures, charts, tables&gt; to record their observations?</li> <li>• Can they measure using &lt;simple equipment&gt;?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting?</li> <li>• Can they use information from books and online information to find things out?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they describe what they have found using scientific language?</li> <li>• Can they make accurate measurements using standard units?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they explain their findings in different ways (display, presentation, writing)?</li> <li>• Can they use their findings to draw a simple conclusion?</li> <li>• Can they suggest improvements and predictions for further tests?</li> </ul>	<p>measurements using standard units?</p> <ul style="list-style-type: none"> <li>• Can they explain their findings in different ways (display, presentation, writing)?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they record more complex data and results using scientific diagrams, labels, classification keys, tables, scatter graphs, bar and line graphs?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they decide which units of measurement they need to use?</li> <li>• Can they explain why a measurement needs to be repeated?</li> </ul>	<ul style="list-style-type: none"> <li>• Can they explain why a measurement needs to be repeated?</li> <li>• Can they record their measurements in different ways? (incl bar charts, tables and line graphs)</li> <li>• Can they take measurements using a range of scientific equipment with increasing accuracy and precision?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>• Can they plan in advance which equipment they will need and use it well?</li> <li>• Can they make precise measurements?</li> <li>• Can they collect information in different ways?</li> <li>• Can they record their measurements and observations systematically?</li> <li>• Can they explain qualitative and quantitative data?</li> </ul>
---	---	---	--	--	---

**SCIENCE SKILLS PROGRESSION**  
WORKING SCIENTIFICALLY



Considering Evidence, Evaluating and Classifying					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>Can they identify and classify things they observe?</li> <li>Can they think of some questions to ask?</li> <li>Can they answer some scientific questions?</li> <li>Can they give a simple reason for their answers?</li> <li>Can they explain what they have found out?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they talk about similarities and differences?</li> <li>Can they explain what they have found out using scientific vocabulary?</li> </ul>	<ul style="list-style-type: none"> <li>Can they organise things into groups?</li> <li>Can they find simple patterns (or associations)?</li> <li>Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they suggest more than one way of grouping animals and plants and explain their reasons?</li> </ul>	<ul style="list-style-type: none"> <li>Can they explain what they have found out and use their measurements to say whether it helps to answer their question?</li> <li>Can they use a range of equipment (including a data-logger) in a simple test?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they suggest how to improve their work if they did it again?</li> </ul>	<ul style="list-style-type: none"> <li>Can they find any patterns in their evidence or measurements?</li> <li>Can they make a prediction based on something they have found out?</li> <li>Can they evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables?</li> <li>Can they use straightforward scientific evidence to answer questions or to support their findings?</li> <li>Can they identify differences, similarities or changes related to simple scientific ideas or processes?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they report findings from investigations through written explanations and conclusions?</li> <li>Can they use a graph or diagram to answer</li> </ul>	<ul style="list-style-type: none"> <li>Can they report and present findings from enquiries through written explanations and conclusions?</li> <li>Can they use a graph to answer scientific questions?</li> </ul> <p>GD:</p> <ul style="list-style-type: none"> <li>Can they find a pattern from their data and explain what it shows?</li> <li>Can they link what they have found out to other science?</li> <li>Can they suggest how to improve their work and say why they think this?</li> </ul>	<ul style="list-style-type: none"> <li>Can they find a pattern from their data and explain what it shows?</li> <li>Can they use a graph to answer scientific questions?</li> <li>Can they link what they have found out to other science?</li> <li>Can they suggest how to improve their work and say why they think this?</li> <li>Can they record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models?</li> <li>Can they report findings from investigations through written explanations and conclusions?</li> <li>Can they identify scientific evidence that has been used to support to refute ideas or arguments?</li> <li>Can they report and present findings from enquiries, including conclusions, causal relationships and</li> </ul>

**SCIENCE SKILLS PROGRESSION**  
**WORKING SCIENTIFICALLY**



			scientific questions?		<p>explanations of and degree of trust in results, in oral and written forms such as displays and other presentations?</p> <p>GD:</p> <ul style="list-style-type: none"><li>• Can they draw conclusions from their work?</li><li>• Can they link their conclusions to other scientific knowledge?</li><li>• Can they explain how they could improve their way of working?</li></ul>
--	--	--	-----------------------	--	---