Science : Working Scientifically

	Year 3	Year 4	Year 5	Year 6
Planning	<ul> <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>	<ul> <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 is the best way for collecting it?</li> <li>Can they use their findings to draw a simple conclusion?</li> </ul>	<ul> <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>	<ul> <li>Can they explore different ways to test an idea, choose the best way, and give reasons?</li> <li>Can they plan and carry out an investigation by controlling variables fairly and accurately?</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 presentation?</li> </ul>
Obtaining and presenting	<ul> <li>Can they measure using different equipment and units of measure?</li> <li>Can they record their observations in different ways? (labelled diagrams, charts etc)</li> <li>Can they describe what they have found using scientific language?</li> <li>Can they make accurate measurements using standard units?</li> </ul>	<ul> <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 measurements using standard units?</li> <li>Can they explain their findings in different ways (display, presentation, writing)?</li> </ul>	<ul> <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> <li>Can they record more complex data and results using scientific diagrams, labels, classification keys, tables, scatter graphs, bar and line graphs?</li> </ul>	<ul> <li>Can they explain why they have chosen specific equipment?</li> <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> <li>Can they record their measurements in different ways? (incl bar charts, tables and line graphs)</li> </ul>
Considering evidence and evaluating	<ul> <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 thermometers and data loggers) in a simple test?</li> </ul>	<ul> <li>Can they find any patterns in their evidence or measurements?</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>	<ul> <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> <li>Can they suggest how to improve their work and say why they think this?</li> </ul>	<ul> <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 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> </ul>