

<p>Level 5</p>	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Use abstract ideas or models or more than one step when describing processes or phenomena <input type="text"/> <input type="text"/> <input type="text"/> . Explain processes or phenomena, suggest solutions to problems or answer questions by drawing on abstract ideas or models <input type="text"/> <input type="text"/> <input type="text"/> . Recognise scientific questions that do not yet have definitive answers <input type="text"/> <input type="text"/> <input type="text"/> . Identify the use of evidence and creative thinking by scientists in the development of scientific ideas <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Describe different viewpoints a range of people may have about scientific or technological developments <input type="text"/> <input type="text"/> <input type="text"/> . Indicate how scientific or technological developments may affect different groups of people in different ways <input type="text"/> <input type="text"/> <input type="text"/> . Identify ethical or moral issues linked to scientific or technological developments <input type="text"/> <input type="text"/> <input type="text"/> . Link applications of science or technology to their underpinning scientific ideas <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Distinguish between opinion and scientific evidence in contexts related to science, and use evidence rather than opinion to support or challenge scientific arguments <input type="text"/> <input type="text"/> <input type="text"/> . Decide on the most appropriate formats to present sets of scientific data, such as using line graphs for continuous variables <input type="text"/> <input type="text"/> <input type="text"/> . Use appropriate scientific and mathematical conventions and terminology to communicate abstract ideas <input type="text"/> <input type="text"/> <input type="text"/> . Suggest how collaborative approaches to specific experiments or investigations may improve the evidence collected <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Recognise significant variables in investigations, selecting the most suitable to investigate <input type="text"/> <input type="text"/> <input type="text"/> . Explain why particular pieces of equipment or information sources are appropriate for the questions or ideas under investigation <input type="text"/> <input type="text"/> <input type="text"/> . Repeat sets of observations or measurements where appropriate, selecting suitable ranges and intervals <input type="text"/> <input type="text"/> <input type="text"/> . Make, and act on, suggestions to control obvious risks to themselves and others <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Interpret data in a variety of formats, recognising obvious inconsistencies <input type="text"/> <input type="text"/> <input type="text"/> . Provide straightforward explanations for differences in repeated observations or measurements <input type="text"/> <input type="text"/> <input type="text"/> . Draw valid conclusions that utilise more than one piece of supporting evidence, including numerical data and line graphs <input type="text"/> <input type="text"/> <input type="text"/> . Evaluate the effectiveness of their working methods, making practical suggestions for improving them <input type="text"/> <input type="text"/> <input type="text"/>
<p>Level 4</p>	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Use scientific ideas when describing simple processes or phenomena <input type="text"/> <input type="text"/> <input type="text"/> . Use simple models to describe scientific ideas <input type="text"/> <input type="text"/> <input type="text"/> . Identify scientific evidence that is being used to support or refute ideas or arguments <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Describe some simple positive and negative consequences of scientific and technological developments <input type="text"/> <input type="text"/> <input type="text"/> . Recognise applications of specific scientific ideas <input type="text"/> <input type="text"/> <input type="text"/> . Identify aspects of science used within particular jobs or roles <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Select appropriate ways of presenting scientific data <input type="text"/> <input type="text"/> <input type="text"/> . Use appropriate scientific forms of language to communicate scientific ideas, processes or phenomena <input type="text"/> <input type="text"/> <input type="text"/> . Use scientific and mathematical conventions when communicating information or ideas <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Decide when it is appropriate to carry out fair tests in investigations <input type="text"/> <input type="text"/> <input type="text"/> . Select appropriate equipment or information sources to address specific questions or ideas under investigation <input type="text"/> <input type="text"/> <input type="text"/> . Make sets of observations or measurements, identifying the ranges and intervals used <input type="text"/> <input type="text"/> <input type="text"/> . Identify possible risks to themselves and others <input type="text"/> <input type="text"/> <input type="text"/> 	<p>Across a range of contexts and practical situations pupils:</p> <ul style="list-style-type: none"> . Identify patterns in data presented in various formats, including line graphs <input type="text"/> <input type="text"/> <input type="text"/> . Draw straightforward conclusions from data presented in various formats <input type="text"/> <input type="text"/> <input type="text"/> . Identify scientific evidence they have used in drawing conclusions <input type="text"/> <input type="text"/> <input type="text"/> . Suggest improvements to their working methods, giving reasons <input type="text"/> <input type="text"/> <input type="text"/>