



Key Stage 3 Science Assessment Grid

	A	B	C	D	E	F	G	H	I
<p>Theory Strand</p> <p><u>Demonstrate and apply</u> knowledge and understanding of scientific ideas, techniques and procedures</p>	<p>Remember some scientific keywords</p> <p>Name some key scientific principles</p> <p>Identify simple similarities and differences between ideas</p>	<p>State key scientific principles</p> <p>Write a short answer based on scientific fact</p> <p>Complete a sentence or diagram</p> <p>Label a diagram</p> <p>Identify theory in everyday contexts</p>	<p>Describe scientific concepts, recalling some facts, events or processes in an accurate way</p> <p>Define the meaning of some scientific keywords and concepts</p> <p>Choose the most accurate answer from a range of alternatives</p>	<p>Describe and explain scientific concepts, recalling some facts, events or processes in an accurate way</p> <p>Describe some real world examples which demonstrate scientific concepts</p> <p>Compare simple ideas in science</p>	<p>Describe and explain how real world examples apply to scientific concepts</p> <p>Define the meaning of most scientific keywords and concepts</p> <p>Can use simple models to describe scientific concepts</p>	<p>Outline multiple descriptions and explanations of scientific concepts</p> <p>Accurately compare different scientific concepts, outlining similarities and differences with precision</p>	<p>Compare and contrast different scientific concepts using examples to support understanding</p> <p>A breadth and depth of scientific definitions used</p>	<p>Apply scientific knowledge to unfamiliar concepts</p> <p>Describe how scientific evidence can support or disprove scientific ideas</p> <p>Suggest ideas by applying knowledge and understanding to a new situation</p>	<p>Explain how evidence supports accepted scientific ideas or contribute to questions science cannot answer</p> <p>Make connections between abstract ideas</p>
<p>Interpret Strand</p> <p><u>Analyse</u> information and ideas to interpret and evaluate; make judgements and draw conclusions</p>	<p>Write a simple, scaffolded conclusion</p> <p>Perform a basic calculation with scaffolding</p>	<p>Draw partially complete conclusions from data</p> <p>Perform a basic calculation</p>	<p>Draw simple conclusions from qualitative and quantitative data</p> <p>Write a simple evaluation</p> <p>Identify given data to make simple calculations</p>	<p>Use and quote data to draw conclusions</p> <p>Write an evaluation based on data</p> <p>Make simple predictions based upon data</p> <p>Recall an equation to perform calculations</p>	<p>Outline simple advantages and disadvantages based on simple data</p> <p>Write an evaluation using data to support response</p> <p>Recall multiple equations to perform calculations</p>	<p>Assess information provided to make conclusions based upon scientific knowledge, making simple predictions</p> <p>Outline advantages and disadvantages, quoting data to support decisions</p> <p>Choose the most appropriate equation to support with a calculation</p>	<p>Analyse qualitative and quantitative data and draw logical conclusions and making predictions</p> <p>Evaluate data using quantitative information to justify reasoning</p> <p>Manipulate data to use in a correct equation</p>	<p>Explain and justify how evidence may have limitations and critically evaluate the use of data to make conclusions</p> <p>Analyse qualitative and quantitative data and draw logical conclusions supported by evidence</p> <p>Attempt multi-step calculations with some degree of success</p>	<p>Explain and justify how both qualitative and quantitative evidence may have limitations and critically evaluate the use of data to make conclusions</p> <p>Use a range of mathematical skills to perform complex, multi-step scientific calculations</p>
<p>Practical Strand</p> <p><u>Demonstrate</u> knowledge and understanding of investigative science and experimental procedures to obtain results used to make conclusions</p>	<p>Name several pieces of equipment that will be used in an experiment</p> <p>Follow a method with some support</p> <p>Identify one hazard and the risk it might pose</p> <p>Make some measurements or simple observations</p> <p>Give a statement of what results show</p>	<p>Name key pieces of equipment</p> <p>Write a simple prediction</p> <p>Make a full set of measurements or observations in a table</p> <p>Present data as an appropriate graph</p> <p>Give a simple description of what results show</p>	<p>Follow a method independently or write a simple, scaffolded method</p> <p>Identify independent, dependent and one control variable</p> <p>Identify a hazard and how to reduce risk</p> <p>Appropriate graph with appropriate scales</p> <p>Use scientific ideas, using two scientific keywords, to conclude results</p>	<p>Write a simple method</p> <p>Prediction is supported by scientific understanding using key terms</p> <p>Use data from your table to support your conclusion</p> <p>Suggest an improvement and given a reason</p>	<p>Describe how different pieces of equipment are used in an experiment which can be followed to obtain repeatable data</p> <p>Identify independent, dependent and multiple control variables</p> <p>Graph has fully labelled axes, units and line of best fit</p> <p>Evaluate effectiveness of method, making practical suggestions to improve</p>	<p>Outline experiment in detail which can be followed to obtain repeatable data</p> <p>Explain your prediction using your scientific understanding</p> <p>Identify all variables and describe which may be difficult to control</p> <p>Make a set of measurements with suitable intervals in an appropriate table</p>	<p>Choose appropriate equipment for experiment</p> <p>Describe how a method could be adapted to reduce risk</p> <p>Make a set of measurements with suitable intervals and repeatable data in an appropriate table</p> <p>Appropriate graph chosen</p> <p>Give quantitative relationship in their results</p>	<p>Justify choice of different pieces of equipment</p> <p>Explain why chosen method will give repeatable and precise results</p> <p>Identify quantitative relationship between variables</p> <p>Suggest reasons based on scientific knowledge for limitations in data collected</p>	<p>Assess strength of evidence</p> <p>Explain unexpected observations or measurements</p> <p>Explain modifications to method to improve repeatability and reproducibility</p>



Key Stage 3 Assessment Pathway Plan

Year 7		
Pathway	Assessment Point 1	Assessment Point 2
Foundation (99-)	A	A-B
Intermediate (100-110)	A-B	B-C
Higher (111+)	B-C	C-D

Year 8		
Pathway	Assessment Point 1	Assessment Point 2
Foundation	B-C	B-C
Intermediate	C-D	D-E
Higher	D-E	E-F

Year 9		
Pathway	Assessment Point 1	Assessment Point 2
Foundation	C-D	C-D
Intermediate	E-F	E-F
Higher	F-G	G-H