Description of skill **Yr 7**	Developing	Secure	Advanced	Exceptional
Calculations	Start to use given three term equations (substitute and evaluate)	Can usually use given three term equations (substitute and evaluate)	Can competently use given three term equations (substitute and evaluate)	Can competently rearrange three term equations to change the subject (substitute and evaluate)
Data and Graphing	Can occasionally record data in a simple table and recognise similarities and in differences in data Can usually use graph paper to produce simple graphs, including bar charts, or completes a graph when some points are already plotted and extract data.	Can usually record data in a simple table and recognise similarities and in differences in data Can usually start to plot points on a simple line graph independently (axis given) Or plot scatter graphs with simple axis and interpret scatter graphs, with an appropriate scale.	Can usually record data in a simple table and recognise similarities and in differences in data Can occasionally plot and interpret scatter graphs and explain relationships between variables	Can competently plot and interpret scatter graphs and explain relationships between variables
Knowledge	Can usually define simple key terms and use them to describe some of the main ideas.	Can usually demonstrate Science knowledge, supported by an understanding of key features and characteristics Can develop some logical descriptions, which includes some accurate and relevant detail	Can mainly demonstrate Science knowledge, supported by an understanding of key features and characteristics mostly correctly to both familiar and unfamiliar contexts Can develop mostly accurate and logical descriptions, which includes some relevant detail and simple explanations	Can competently demonstrate accurate high level scientific knowledge, combined with a clear use of scientific literacy and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology Can develop accurate, logical and detailed descriptions, explanations and arguments
Analysis / Evaluation	Can usually begin to identify and use simple information to answer Science questions	Can usually explain relationships between variables and discuss results to form a conclusion Can make some comments relating to experimental methods, but may not demonstrate an understanding of how to improve the experimental method or the accuracy of scientific conclusions	Can occasionally analyse data from experiment/ given and give reasons linked to scientific ideas, considering critically and improvements to, experimental methods and justify their analysis and evaluation with use of complex scientific ideas.	Can competently analyse data from experiment/ given and give reasons linked to scientific ideas, considering critically and improvements to, experimental methods and justify their analysis and evaluation with use of complex scientific ideas.
SPAG: Spelling and Grammar	Attempts to use keywords but frequently miss-spells them. Often forgets punctuation and key grammar rules	Often uses keywords but inconsistently spells them correctly. Punctuation and grammar satisfactory with minor mistakes.	Mostly uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.	Always uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.

Description of skill **Yr 8**	Developing	Secure	Advanced	Exceptional
Calculations	Can usually use given three term equations (substitute and evaluate)	Can competently use given three term equations (substitute and evaluate)	Can competently use given three term equations (substitute and evaluate) **and** convert to SI units	Can competently rearrange three term equations to change the subject (substitute and evaluate) **and** convert to SI units
Data and Graphing	Can usually record data in a simple table and recognise similarities and in differences in data Can usually use graph paper to produce simple graphs, including bar charts, or completes a graph when some points are already plotted and extract data.	Can usually start to plot points on a simple line graph independently (axis given) or plot scatter graphs with simple axis and interpret scatter graphs, with an appropriate scale Can competently record data in a simple table and recognise similarities and in differences in data .	Can competently record data in a simple table and recognise similarities and in differences in data . Can competently plot and interpret scatter graphs and explain relationships between variables	Can competently plot and interpret scatter graphs and explain relationships between variables Can usually determine values using a scatter or line graph.
Knowledge	Can usually demonstrate Science knowledge, supported by an understanding of key features and characteristics	Can mainly demonstrate Science knowledge, supported by an understanding of key features and characteristics mostly correctly to both familiar and unfamiliar contexts Can develop some logical descriptions, which includes some accurate and relevant detail	Can competently demonstrate accurate Science knowledge, supported by an understanding of key features and characteristics mostly correctly to both familiar and unfamiliar contexts Can develop mostly accurate and logical descriptions, which includes some relevant detail and simple explanations	Can competently demonstrate accurate high level scientific knowledge, combined with a clear use of scientific literacy and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology develop accurate, logical and detailed descriptions, explanations and arguments
Analysis / Evaluation	Can usually explain relationships between variables and discuss results to form a conclusion	Can compently explain relationships between variables and discuss results to form a conclusion Can usually make mainly accurate comments relating to experimental methods, but may not demonstrate an understanding of how to improve the experimental method or the accuracy of scientific conclusions	Can competently analyse data from experiment/ given and give reasons linked to scientific ideas. Can consider critically improvements to, experimental methods and justify their analysis and evaluation with use of complex scientific ideas.	Can competently analyse data from experiment/ given and give detailed reasons linked to scientific ideas. Can critically evaluate and refine methodologies, and judge the validity of scientific conclusions.
SPAG: Spelling and Grammar	Attempts to use keywords but frequently miss-spells them. Often forgets punctuation and key grammar rules	Often uses keywords but inconsistently spells them correctly. Punctuation and grammar satisfactory with minor mistakes.	Mostly uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.	Always uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.

Description of skill **Yr 9**	Developing	Secure	Advanced	Exceptional
Calculations	Can perform some calculations when scaffolding is given	Can use appropriate mathematical skills to perform calculations	Can use a range of mathematical skills to perform multi-step scientific calculations	Can use a range of mathematical skills to perform complex, multi-step scientific calculations
Data and Graphing	Can usually record data in a simple table and recognise similarities and in differences in data Can usually use graph paper to produce simple graphs, including bar charts, or completes a graph when some points are already plotted and extract data.	Can usually start to plot points on a simple line graph independently (axis given) or plot scatter graphs with simple axis and interpret scatter graphs, with an appropriate scale Can competently record data in a simple table and recognise similarities and in differences in data .	Can competently record data in a simple table and recognise similarities and in differences in data . Can competently plot and interpret scatter graphs and explain relationships between variables	Can competently plot and interpret scatter graphs and explain relationships between variables Can usually determine values using a scatter or line graph.
Knowledge	Can demonstrate some accurate and appropriate knowledge and understanding and apply these to some familiar contexts, using some accurate scientific terminology Can descriptions are often partial and lacking relevant detail	Can demonstrate mostly accurate and appropriate knowledge and understanding and apply these mostly correctly to familiar and unfamiliar contexts, using mostly accurate scientific terminology Can develop some logical descriptions, which includes some accurate and relevant detail	Can demonstrate accurate and relevant knowledge and understanding and apply these mostly correctly to both familiar and unfamiliar contexts using accurate scientific terminology Can develop accurate, logical and detailed descriptions and straightforward explanations	Can demonstrate relevant and comprehensive knowledge and understanding and apply these correctly to both familiar and unfamiliar contexts using accurate scientific terminology Can develop accurate, logical and detailed descriptions, explanations and arguments
Analysis / Evaluation	Can draw conclusions from qualitative or quantitative data, but evidence to support may not be clear or present Can make some comments relating to experimental methods, but may not demonstrate an understanding of how to improve the experimental method or the accuracy of scientific conclusions	Can analyse qualitative and quantitative data and draw plausible conclusions supported by some evidence Can evaluate methodologies to suggest improvements to experimental methods, and comment on the accuracy of scientific conclusions	Can analyse qualitative and quantitative data and draw logical conclusions, supported by evidence Can evaluate methodologies to suggest improvements and developments to experimental methods, and comment on the accuracy and validity of scientific conclusions	Can critically analyse qualitative and quantitative data and draw logical, well-evidenced conclusions Can critically evaluate and refine methodologies, and judge the validity of scientific conclusions
SPAG: Spelling and Grammar	Attempts to use keywords but frequently miss-spells them. Often forgets punctuation and key grammar rules	Often uses keywords but inconsistently spells them correctly. Punctuation and grammar satisfactory with minor mistakes.	Mostly uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.	Always uses keywords where appropriate and consistently spells them correctly. Punctuation and grammar good with few mistakes.