

KS3 Assessment at Braunton Academy

Science Year 7

Grade	Students at this grade will typically show the following by the end of Year 7 in Science
Showing Mastery	Knowledge & Ideas - Has comprehensive scientific knowledge and understanding and can apply these correctly to both familiar and unfamiliar contexts - Uses accurate terminology. - Able to justify and identify limitations to a scientific prediction - Able to create own scientific models or make improvements to existing models. Techniques & Procedures – - Able to think creatively to suggest alternative methods or use the given experiment to test an extension to the hypothesis. - Able to select and justify the most important control variable in an experiment Mathematical Skills – - Able to apply “Greater Depth” knowledge with confidence and independence - Able to account for any anomalies. - Able to convert SI units.
Working at Greater Depth	Knowledge & Ideas – - Has accurate scientific knowledge and can apply this correctly to familiar and unfamiliar contexts - Uses accurate terminology. - Able to make and explain a simple prediction using scientific knowledge. - Able to compare different models and understand their limitations. Techniques & Procedures – - Able to independently follow a given method - Able to name the control variables - Able to select and use common scientific equipment accurately. - Can evaluate methods to suggest limitations and improvements. Mathematical Skills – - Able to accurately use appropriate mathematical skills to perform calculations - Able to design and populate a simple results table with appropriate units. - Able to select and plot appropriate graphs. - Able to draw conclusions, and identify anomalies supported by some evidence, from data. - Able to use the prefixes k and m.
	Knowledge & Ideas –

Working at Expected Standard	• Has mostly accurate scientific knowledge and can apply these mostly correctly to familiar contexts • Uses mostly accurate terminology. • Able to make a simple prediction using scientific knowledge. • Able to describe models and the need for using them. Techniques & Procedures – • Able to safely follow a method to obtain results. • Able to identify control variables. • Able to name and use common scientific equipment. • Able to evaluate methods to suggest improvements. Mathematical Skills – • Able to use appropriate mathematical skills to perform calculations. • Able to draw and populate a simple results table. • Able to select and plot appropriate graphs. • Able to draw conclusions, supported by some evidence, from data. • Knows relevant SI units.
Working Towards Expected Standard	Knowledge & Ideas – • Has some relevant scientific knowledge • Uses limited scientific terminology Techniques & Procedures – • With support can safely follow a method to obtain results. • Able to identify control variables. • Able to name and use common scientific equipment. • Able to evaluate methods to suggest improvements. Mathematical Skills – • With support is able to use appropriate mathematical skills to perform simple calculations • Able to substitute numbers into a given formula. • Able to describe simple trends in data.

Science Year 8

Grade	Students at this grade will typically show the following by the end of Year 7 in Science
Showing Mastery	Knowledge & Ideas – - Has comprehensive knowledge and understanding and can apply these correctly to both familiar and unfamiliar contexts using accurate terminology. - Able to justify and give limitations to a scientific prediction. - Able to create own models or improvements to existing models. Techniques & Procedures – - Able to think creatively to suggest alternative methods or use the experiment to test an extension to the hypothesis. - Able to select and justify the most important control variable. - Able to choose a number of appropriate repeats. Mathematical Skills – - Able to apply "Greater Depth" knowledge plus perform multi-step complex calculations. - Able to use giga, micro, nano and mega prefixes
Working at Greater Depth	Knowledge & Ideas – - Has accurate knowledge and can apply this correctly to familiar and unfamiliar contexts using accurate terminology. - Able to make and explain a simple prediction using scientific knowledge. - Able to compare different models and understand their limitations. Techniques & Procedures – - Able to independently follow a given method. - Able to suggest how to measure dependent variable and identify a range for the independent and control variables. - Able to select and use common scientific equipment accurately. - Able to evaluate methods to suggest limitations and improvements. Mathematical Skills – - Able to accurately use appropriate mathematical skills to perform more complex calculations including simple rearrangement. - Able to complete a results table with mean recorded to correct number of significant figures. - Able to independently draw appropriate graphs and extrapolate data. - Able to draw conclusions, and identify and account for anomalies supported by some evidence, from data. - Able to convert between k, m and base units.
Working at Expected Standard	Knowledge & Ideas – - Has mostly accurate knowledge and can apply these mostly correctly to familiar contexts, using mostly accurate terminology. - Able to make a simple prediction using scientific knowledge. - Able to describe scientific models and the need for using them.

	Techniques & Procedures – • Able to independently follow a given method. • Able to identify dependent, independent and control variables. • Able to select and use common scientific equipment accurately. • Able to evaluate methods to suggest limitations and improvements. Mathematical Skills – • Able to accurately use appropriate mathematical skills to perform calculations. • Able to design and populate a simple results table with appropriate units and calculate means. • Able to select and plot appropriate graphs. • Able to draw conclusions, and identify anomalies supported by some evidence, from data. • Able to use prefixes k and m
Working Towards Expected Standard	Knowledge & Ideas – • Has some relevant knowledge and can use limited scientific terminology Techniques & Procedures – • Able to safely follow a method to obtain results. • Able to identify control variables. • Able to name and use common scientific equipment. • Able to evaluate methods to suggest improvements. Mathematical Skills – • Able to use appropriate mathematical skills to perform calculations. • Able to draw and populate a simple results table. • Able to select and plot appropriate graphs. • Able to draw conclusions, supported by some evidence, from data. • Knows relevant SI units.

Grade	Students at this grade will typically show the following by the end of Year 9 in Science
Showing Mastery	Knowledge & Ideas – - Has comprehensive knowledge and understanding and can apply these correctly to both familiar and unfamiliar contexts using accurate terminology. - Able to justify and give limitations to a scientific prediction. - Able to create own scientific models or improvements to existing models. Techniques & Procedures – - Able to refine a method by conducting a preliminary test to establish a range for the independent variable/appropriate equipment. - Can think creatively to suggest alternative methods or use the experiment to test an extension to the hypothesis. - Able to choose a number of appropriate repeats. Mathematical Skills – - Able to use standard form in calculations and unit conversions. - Able to identify mathematical relationships from graphs and tables of data. - Able to calculate and apply the gradient of a graph.
Working at Greater Depth	Knowledge & Ideas – - Has accurate knowledge and can apply this correctly to familiar and unfamiliar contexts using accurate terminology. - Able to make and explain a simple prediction using scientific knowledge. - Able to compare different scientific models and understand their limitations. Techniques & Procedures – - Able to independently design a method. - Able to suggest how to measure dependent variable and identify a range for the independent and control variables. - Able to select and justify the most important control variable. - Able to select and use common scientific equipment accurately. - Able to evaluate methods to suggest limitations and improvements. Mathematical Skills – - Can accurately use appropriate mathematical skills to perform more complex and multi- step calculations including rearrangement. - Able to complete results table with the mean recorded to correct number of sig figs. - Able to independently draw appropriate graphs and extrapolate data. - Can draw conclusions, and identify and account for all anomalies. - Able to convert between a range of prefixes (e.g. giga, micro, nano and mega)

Working at Expected Standard	Knowledge & Ideas – • Has mostly accurate knowledge and can apply these mostly correctly to familiar contexts, using mostly accurate terminology. • Able to make a simple prediction using scientific knowledge. • Able to describe scientific models and the need for using them. Techniques & Procedures – • Able to design a method. • Able to suggest dependent, independent and control variables. • Able to select and use common scientific equipment accurately. • Can evaluate methods to suggest limitations and improvements Mathematical Skills – • Able to accurately use appropriate mathematical skills to perform more complex calculations including simple rearrangement. • Able to complete a results table with the mean recorded to correct number of sig figs. • Able to independently draw appropriate graphs and extrapolate data. • Can draw conclusions and identify and account for anomalies. • Able to convert between k, m and base units. • Knows a range of suitable prefixes (e.g. giga, micro, nano and mega)
Working Towards Expected Standard	Knowledge & Ideas – • Has some relevant knowledge and can use limited scientific terminology Techniques & Procedures – • Able to safely follow a method to obtain results. • Can identify dependent, independent and control variables. • Able to name and use common scientific equipment. • Able to evaluate methods to suggest improvements Mathematical Skills – • Able to use appropriate mathematical skills to perform calculations. • Able to draw and populate a simple results table. • Able to select and plot appropriate graphs. • Can draw conclusions from the graph, supported by some evidence, from data. • Knows relevant SI units.