

KS3 Assessment at Braunton Academy

Maths Year 7

Grade	Students at this grade will typically show the following by the end of Year 7 in Drama
Showing Mastery	- Find missing sides in a perimeter / area calc for trapeziums, triangles and parallelograms. - Calculate interior and exterior angles of polygons and angles involving parallel lines - Factorising and expanding with powers. - Construction and solving equations. - Solving higher order equations using trial and improvement method. - Recognising geometric sequences.
Working at Greater Depth	- Work confidently with fractions, decimals and percentages - Calculate the perimeter / area of trapeziums, triangles and parallelograms. - Use estimates - Understand and use product of prime factors - Know simple laws of indices. - Expanding and factorising expressions. - Generate a linear sequence from the nth term - Plot a graph from a table of values. Plot / read lines parallel to the axis (and $y = x$) - Calculate the Mode, Median, Mean and Range from a frequency table - Construct simple pie charts
Working at Expected Standard	- Be able to work with decimals (exc division by a decimal) including simple rounding - Identify primes and find HCF / LCM by listing - Fraction calculations including fraction of an amount - Find a percentage of an amount - Simplify ratios and share a quantity into a given ratio. - Understand like terms to be able to manipulate algebraic expressions and solve up to 2-step equations - Find inputs and outputs of function machines - Describe and continue different types of sequences - Calculate the area and perimeters of triangles and simple quadrilaterals and the volumes of cuboids - Use basic angles facts to solve simple problems (inc special triangles) - Understand basic symmetry - Perform simple metric conversions - Draw and interpret basic charts and graphs of data - Calculate the Mode, Median, Mean and Range of a set of data - Calculate simple single event probability

Working Towards Expected Standard	• Be able to work with positive integers • Understand Fraction/Decimal/Percentage equivalence • Add / Subtract fractions with a common denominator • Find and represent simple fractions / percentages of an amount • Understand and use ratio notation. • Solve one step equations (positive integer solutions) • Find the output of a two-step function machine • Read and plot coordinates in 4 quadrants • Recognise types of shapes and polygons • Calculate area / perimeter of rectangles • Know simple units of measure (including time) and be able to estimate everyday objects • Collect data and read basic charts and graphs of data • Understand and use simple probability vocabulary • Identify the mode from a set of data and calculate the range
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Grade	Students at this grade will typically show the following by the end of Year 8 in Drama
Showing Mastery	- Solve percentage problems using appropriate methods - Convert area and volume compound units - Estimate the mean from grouped data - Using and applying indices in algebraic calculations and expressions - Identify the gradient and y-intercept of an equation in the form $y = mx + c$ - Solve multi-step problems involving angles in parallel lines and special quadrilaterals
Working at Greater Depth	- Perform reverse fraction and percentage calculations - Work with numbers in standard form - Understand and use the laws of indices (inc negative powers) - Understand inverse proportion - Expand and factorise binomials - Form and solve equations involving unknowns on both sides - Rearrange a formula (that does not require factorising) - Find the gradient of a straight line - Find the nth term of a linear sequence, both positive and negative - Construct angle and perpendicular bisectors
Working at Expected Standard	- Be able to solve problems involving four operations and estimation - Solve problems involving direct proportion (e.g. recipes, exchange rates, scale drawings etc) - Perform algebraic manipulation (substitution, form and solve equations/inequalities, expand and factorise brackets) - Plot linear graphs using a table of values - Calculate angles involving parallel lines and special quadrilaterals - Construct triangles - Calculate areas and perimeters of circles and rectilinear compound shapes - Calculate the Mode, Median and Range from an ungrouped frequency table - Construct simple pie charts - Draw and interpret scatter graphs
Working Towards Expected Standard	- Be able to work with decimals (exc division by a decimal) including simple rounding - Identify primes and find HCF /LCM by listing - Fraction calculations including fraction of an amount - Find a percentage of an amount - Simplify ratios - Substitute integers into expressions - Describe and continue different types of sequences - Calculate the area and perimeters of triangles and simple quadrilaterals - Use basic angles facts to solve simple problems (inc special triangles) - Calculate volumes of cuboids

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| | <ul style="list-style-type: none">• Understand basic symmetry• Perform simple metric conversions• Draw and interpret basic charts and graphs of data• Calculate the Mode, Median, Mean and Range of a set of data• Calculate simple single event probability• |
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Grade	Students at this grade will typically show the following by the end of Year 9 in Drama
Showing Mastery	• Work with recurring decimals, surds and fractional indices • Work with direct and inverse proportion graphically and algebraically • Factorise to solve quadratic equations and inequalities • Be able to manipulate equations to find gradient, intercept and equations of linear and real-life graphs • Prove congruence and similarity in triangles • Convert units of speed and calculate acceleration from Time/Distance/Speed graphs • Draw a box and whisker plot from a list of data and/or a cumulative frequency curve and compare with another one • Solve simultaneous equations via elimination and/or substitution methods.
Working at Greater Depth	• Work confidently with percentages including reverse, simple interest and compound interest • Apply ratio to problems including combining two ratios • Manipulate complex formulae, equations and inequalities • Find the upper and lower bounds of any numbers • Plot quadratic, cubic and reciprocal graphs with accuracy (and solve simultaneous equations graphically) • Work with circle area, perimeter, arc length and sectors (including reverse calculations with a circle) • Solve problems involving polygons (inc interior and exterior angles) • Solve problems involving Pythagoras' Theorem • Calculate sides and angles using the trigonometric ratios • Estimate the mean from grouped data and IQR from a list • Draw probability tree diagrams of independent events. Use the product rule to calculate outcomes from combinations of events
Working at Expected Standard	• Calculate percentage / fractional change and reverse fraction calculations • Perform calculations with any integers, decimals, fractions and standard form • Find the HCF/LCM of two numbers in any context using prime factors • Solve problems involving ratio and direct proportion (e.g. rates of pay, exchange rates) • Draw graphs of direct proportion • Substitute values into complex expressions and formulae • Solve equations and inequalities with unknowns on both sides • Rearrange a formula (without factorising) • Expand and factorise quadratics • Draw straight line graphs. Find the gradient and y-intercept of a line with an equation in the form $y = mx + c$ • Understand similarity • Recognise and draw nets, plans and elevations of 3D objects

	• Calculate area and perimeter of compound shapes (including semicircles and quadrants) • Calculate volume of prisms and cylinders • Solve angle problems including exterior and interior angles of polygons • Understand, measure and draw bearings • Be able to construct loci, and draw and describe transformations • Use Pythagoras' Theorem • Draw and interpret Time / Distance / Speed graphs and work with compound measures • Calculate averages from an ungrouped frequency table • Systematically list outcomes of an event • Calculate and use relative frequency
Working Towards Expected Standard	• Perform calculations involving all 4 operations with integers and decimals (exc division by decimals) to solve problems. Correctly apply the order of operations. • Use ratios in simple calculations • Expand and simplify multiple single brackets in an expression • Solve two-step equations • Substitute integers into expressions and formulae • Know the properties of 2D and 3D shapes (inc prisms) • Calculate the volume of cuboids • Draw bar-charts and pictograms • Calculate single event probability