

LQS Maths Dept

**Subject: Y8 Mathematics Support**

Year 8 Support	Autumn A			Autumn B		
Unit & length	<b>Rounding &amp; Approximation (2wks)</b>	<b>Numbers &amp; Arithmetic (3wks)</b>	<b>Multiples, Factors &amp; Primes (2wks)</b>	<b>Exploring Fractions, Decimals &amp; Percentages (3wks)</b>	<b>Algebraic Expressions (2wks)</b>	<b>Coordinates (2wks)</b>
Curriculum outline	Rounding to a power of 10 Rounding decimals to integers	Understanding place value Digits to words and vice versa Ordering positive integers Adding & subtracting integers and decimals Multiplying and dividing by powers of 10 BODMAS Effective calculator use	Recognise and use multiples Lowest Common Multiple Recognise and use factors Highest Common Factor	Fractions of a shape Equivalent fractions Simplifying fractions Finding a common denominator Ordering fractions Adding and subtracting fractions with the same denominator	Introduction to algebraic notation Reading and writing algebra Simplify expressions by collecting positive terms Simplify expressions by collecting like terms, with positive and negative coefficients	Describe and plot coordinates in the first quadrant Describe and plot coordinates in all four quadrants
Assessment/s	MyMaths homework x 2 Baseline Assessment	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

Year 8 Support	Spring A			Spring B		
Unit & length	<b>Proportional Reasoning (2wks)</b>	<b>Measuring Data (2wks)</b>	<b>Mathematical Movement (2wks)</b>	<b>Sequences (2wks)</b>	<b>Formulae (2wks)</b>	<b>Angles &amp; Shape (2wks)</b>
Curriculum outline	Compare quantities using fractions Compare quantities using percentages Compare quantities using ratio Simplify ratios	Determine the range and mode of a simple data set Determine the median of a simple data set, with an odd and an even number of elements Determine the mean of a simple data set	Perform a reflection on squared paper Perform a reflection on a coordinate grid, in the axes only Perform a simple translation, written as words Describe a simple translation using words	Recognise and use the term to term rule for a sequence Finding next terms, or missing terms, withing a sequence Generate terms of a sequence from a term to term rule Work with picture patterns Explore simple position to term sequences	Reading and writing formulae Substitute positive values into simple formulae	Explore rotational and line symmetry within 2D shapes Recognise and use the properties of triangles Recognise and use the properties of quadrilaterals
Assessment/s	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

LQS Maths Dept

Year 8 Support	Summer A			Summer B		
Unit & length	Presentation of data (2wks)	Calculating Space (2wks)	Solving Linear Equations (2wks)	Calculating space (3wks)	Probability (2wks)	Consolidation
Curriculum outline	Construct and interpret frequency tally charts Construct and interpret simple bar charts Construct and interpret dual bar charts Construct and interpret line graphs	Calculate the perimeter of 2D shapes Investigate the circumference of circles	Express and solve missing number problems pictorially Interpret simple equations Solve one-step linear equations by balance	Determine areas on square grids Calculate the area of rectangles and squares Calculate the area of composite rectilinear shapes Calculate the area of triangles	Become familiar with the probability scale Place events on a probability scale Write probabilities as fractions, decimals and percentages Explore probability experiments	Consolidation and retrieval of key concepts
Assessment/s	MyMaths homework x 2	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 End of term assessment

LQS Maths Dept

Subject: Y8 Mathematics Core

Year 8 Core	Autumn A			Autumn B		
Unit & length	Rounding & Approximation (2wks)	Numbers & Arithmetic (3wks)	Multiples, Factors & Primes (2wks)	Exploring Fractions, Decimals & Percentages (3wks)	Algebraic Expressions (2wks)	Coordinates (2wks)
Curriculum outline	Rounding to a power of 10 Rounding to decimal places Rounding to significant figures	Place value in decimals Order decimals Multiply and divide by a power of 10 Effective calculator usage Practical applications of negative numbers Add and subtract negative numbers Multiply and divide negative numbers BODMAS Checking answers using inverses	Recognise and use multiples Lowest Common Multiple Recognise and use factors Highest Common Factors Explore Prime numbers Prime decomposition	Use common factors to simplify fractions Use common multiples to find equivalent fractions Compare and order fractions Know and use simple conversions between fractions, decimals and percentages Add and subtract fractions with the same denominator and different denominators Multiply fractions Divide fractions Convert mixed numbers to improper fractions and vice versa Calculate with all four operations involving mixed numbers	Introduction to algebraic notation Read and write algebra Simplify expressions, with positive and negative coefficients, by collecting like terms Form simple algebraic expressions	Describe and plot coordinates in the first quadrant Describe and plot coordinates in all four quadrants Use coordinates to determine a horizontal or vertical line Use coordinates to plot a horizontal or vertical line
Assessment/s	MyMaths homework x 2	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

LQS Maths Dept

Year 8 Core	Spring A			Spring B		
Unit & length	Proportional Reasoning (2wks)	Measuring Data (2wks)	Mathematical Movement (2wks)	Sequences (2wks)	Formulae (2wks)	Angles & Shapes (2wks)
Curriculum outline	Compare quantities using fractions Compare quantities using percentages Compare quantities using ratios Simplify ratios Solve word problems involving ratios Find missing terms in a ratio Sharing quantities in a ratio Solve problems involving direct proportion	Determine the range and mode of a simple data set Determine the median of a simple data set, with an odd and an even number of elements Determine the mean of a simple data set Recognising outliers Use averages to solve problems	Use coordinates to describe or plot the position of a point in all four quadrants Use coordinates to determine a horizontal or vertical line, and plot a horizontal or vertical line Carry out a vertical or horizontal reflection Describe a vertical or horizontal reflection Introduction to vector notation Perform a simple translation using vectors Describe a simple translation using vectors	Recognise and describe a linear sequence Finding the next terms, or missing terms in a sequence Generate terms from a term to term rule, or a picture sequence Finding the nth term of a linear sequence Solve problems involving linear sequences	Reading and writing formulae Substituting positive values into a formula Substituting negative values into a formula	Find missing angles at a point Find missing angles on a straight line Find missing angles in a triangle Find missing angles that are vertically opposite Solve problems involving missing angles Explore rotational and line symmetry in 2D shapes Recognise and use the properties of triangles & quadrilaterals Find missing angles in polygons Explore the properties of 3D shapes
Assessment/s	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

LQS Maths Dept

Year 8 Core	Summer A			Summer B		
Unit & length	Presentation of Data (2wks)	Calculating Space 1 (2wks)	Solving Equations (2wks)	Calculating Space 2 (3wks)	Probability (2wks)	Consolidation
<b>Curriculum outline</b>	Construct and interpret bar charts Construct and interpret dual bar charts Construct and interpret pictograms Construct pie charts	Calculate the perimeter of 2D shapes, inc rectilinear shapes and triangles Calculate the circumference of a circle, given the diameter or the radius	Know and use the basic rules of algebraic notation Express and solve missing number problems algebraically Solve one-step equations by balance Solve two-step equations by balance Form and solve simple equations	Calculate the area of rectangles Calculate the area of triangles Calculate the area of parallelograms Calculate the area of trapezium Calculate the area of a circle, given the radius or diameter Calculate the volume of cubes and cuboids Calculate the volume of other prisms, inc cylinders	Become familiar with the probability scale Place events on a probability scale Write probabilities as fractions, decimals and percentages Explore probability experiments Calculate expected outcomes	Consolidation and retrieval of key concepts
<b>Assessment/s</b>	MyMaths homework x 2	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 End of term assessment

## Subject: Y8 Mathematics Extension

Year 8 Extension	Autumn A			Autumn B		
Unit & length	Rounding & Approximation (2wks)	Numbers & Arithmetic (3wks)	Multiples, Factors & Primes (2wks)	Exploring Fractions, Decimals & Percentages (3wks)	Algebraic Expressions (2wks)	Coordinates (2wks)
Curriculum outline	Rounding to a power of 10 Rounding to decimal places Rounding to significant figures Estimate solutions by using significant figures	Place value in decimals Order decimals Multiply and divide by a power of 10 Effective calculator usage Practical applications of negative numbers Add and subtract negative numbers Multiply and divide negative numbers BODMAS Checking answers using inverses	Recognise and use multiples Lowest Common Multiple Recognise and use factors Highest Common Factors Explore Prime numbers Prime decomposition Write composite numbers as a product of prime factors	Use common factors to simplify fractions Use common multiples to find equivalent fractions Compare and order fractions Know and use simple conversions between fractions, decimals and percentages Add and subtract fractions with the same denominator and different denominators Multiply fractions Divide fractions Convert mixed numbers to improper fractions and vice versa Calculate with all four operations involving mixed numbers	Introduction to algebraic notation Read and write algebra Simplify expressions, with positive and negative coefficients, by collecting like terms Form simple algebraic expressions Expand a single bracket Expand multiple single brackets and simplify	Describe and plot coordinates in all four quadrants Construct a table of values for a linear function Plot a straight line graph
Assessment/s	MyMaths homework x 2	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

LQS Maths Dept

Year 8 Extension	Spring A			Spring B		
Unit & length	Proportional Reasoning (2wks)	Measuring Data (2wks)	Mathematical Movement (2wks)	Sequences (2wks)	Formulae (2wks)	Angles & Shapes (2wks)
Curriculum outline	Compare quantities using fractions Compare quantities using percentages Compare quantities using ratios Simplify ratios Solve word problems involving ratios Find missing terms in a ratio Sharing quantities in a ratio Solve problems involving direct proportion	Determine the range and mode of a simple data set Determine the median of a simple data set, with an odd and an even number of elements Determine the mean of a simple data set Recognising outliers Use averages to solve problems Use averages to compare simple data sets	Use coordinates to describe or plot the position of a point in all four quadrants Perform and describe a reflection Introduction to vector notation Perform and describe a translation using vectors Perform and describe a rotation Explore combinations of transformations	Recognise and describe a linear sequence Finding the next terms, or missing terms in a sequence Generate terms from a general rule Finding the nth term of a linear sequence Solve problems involving linear sequences Explore geometric sequences	Reading and writing formulae Substituting positive values into a formula Substituting negative values into a formula	Find missing angles at a point Find missing angles on a straight line Find missing angles in a triangle Find missing angles that are vertically opposite Find missing angles involving parallel lines Solve problems involving missing angles Find missing angles in polygons Explore the properties of 2D & 3D shapes
Assessment/s	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 End of term assessment	MyMaths homework x 2

LQS Maths Dept

Year 8 Extension	Summer A			Summer B		
Unit & length	Presentation of Data (2wks)	Calculating Space 1 (2wks)	Solving Equations (2wks)	Calculating Space 2 (3wks)	Probability (2wks)	Consolidation
Curriculum outline	Construct and interpret bar charts Construct and interpret dual bar charts Construct and interpret pictograms Construct pie charts Interpret pie charts	Calculate the perimeter of 2D shapes, inc rectilinear shapes and triangles Calculate perimeter of parallelograms and trapezium Calculate the circumference of a circle, given the diameter or the radius	Express and solve missing number problems algebraically Solve two-step equations by balance Solve linear equations with unknowns on both sides by balance Solve equations involving fractions by balance Solve equations involving brackets by balance Form and solve simple equations	Calculate the area of rectangles Calculate the area of triangles Calculate the area of parallelograms Calculate the area of trapezium Calculate the area of a circle, given the radius or diameter Calculate the volume of cubes and cuboids Calculate the volume of other prisms, inc cylinders	Become familiar with the probability scale Place events on a probability scale Write probabilities as fractions, decimals and percentages Explore probability experiments Calculate expected outcomes Work with theoretical probabilities	Consolidation and retrieval of key concepts
Assessment/s	MyMaths homework x 2	MyMaths homework x 2	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2 Open Book Assessment	MyMaths homework x 2	MyMaths homework x 2 End of term assessment