

<u>Year 1</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value within 20 Addition and Subtraction within 10 Shape		Addition and Subtraction within 20 Place Value within 50 Length, Height, Weight and Volume		Multiplication and Division Fractions Position and Direction Place Value within 100 Money & Time	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					
<u>Year 2</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value Addition and Subtraction Money		Multiplication and Division Statistics Geometry: Properties of Shape Fractions		Length and Height Position and Direction Time Mass, Capacity and Temperature	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					
<u>Year 3</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value Addition and Subtraction Multiplication and Division		Multiplication and Division Money Statistics Length and Perimeter Fractions		Fractions Time Properties of Shape Mass and Capacity	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					

<u>Year 4</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value Addition and Subtraction Length and Perimeter Multiplication and Division		Multiplication and Division Area Fractions Decimals		Decimals Money and Time Statistics Properties of Shape Position and Direction	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					
<u>Year 5</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value Addition and Subtraction Statistics Multiplication and Division Perimeter and Area		Multiplication and Division Fractions Decimals and Percentages		Decimals Properties of Shape Position and Direction Converting units Volume	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					
<u>Year 6</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Easter 1</u>	<u>Easter 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Place Value Addition and Subtraction Multiplication and Division Fractions Position and Direction		Decimals and Percentages Algebra Converting Units Perimeter, Area and Volume Ratios		Statistics Properties of Shape Consolidation of Topics	
<b>Literacy Focus-</b> Understanding key words/ vocabulary, comprehension skills when reading problems.						
<b>Numeracy Focus</b> Recognising Maths is in the world around them, developing reasoning and problem solving skills, applying their knowledge of place value to all concepts in Maths.						
<b>SMSC</b>	Problem Solving, Teamwork, Resilience, deep thinking, listening skills, applying their understanding to the world around them					

<u>Year 7</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Number Recall Times tables Bidmas Place value Multiply numbers by single digit Add and subtract numbers with up to 4 digits Square numbers Cube numbers Negative numbers on scales 4 rules with negatives Short division Factors Long multiplication and division Rounding Prime numbers Multiply and divide by powers of 10	Simplifying Recognise next number in a sequence Substitute numbers into expressions plot coordinates in all 4 quadrants Give next value in sequence and describe how sequence built up Solve linear equation involving one operation Collect like terms Multiply terms Solve linear equations involving more than one operation Draw linear graph from table of values	Statistics Data cycle Shade in fraction of shape and identify fraction shaded Add and subtract fractions with same denominator Recognise equivalent fractions Cancel fractions Find a fraction of an integer Identify equivalent fractions, percentages, decimals for $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , tenths and fifths Add fractions with different denominators Order and compare fractions Find % of quantity Simplify a ratio Compare prices to find best buy	Geometry Draw charts and diagrams Interpret charts and diagrams Measures of average Plot coordinates Work out frequency from frequency table Probability scale Conversion graphs Calculate probability List outcomes of 2 events Correlation Speed, distance, time	Exam practise and Tell time using analogue and digital clocks Read scales with variety of divisions Identify standard metric units Measure and draw line accurately Round decimal numbers to 1,2,3 places Use four operations with decimals Convert from one metric unit to another Convert metric to imperial given conversion	Exam practise and Perimeter of 2D shape lines of symmetry Name 2D and 3D shapes Circle terminology Draw circle ; given radius/d Nets of 3D shapes Area of rectangle Rotational symmetry Measure and draw angles and lines Use fact angles at a point angles on a straight line Angles in triangles Angles in quadrilateral Area of triangle Reflection in a mirror line Volume of a cuboid Angles in parallel lines Area of parallelogram Area of trapezium Area and circumference of circles Translation Rotation Enlargement
<b><u>Literacy Focus</u></b> <b><u>Numeracy Focus</u></b>	Key words, vocabulary, worded question comprehension Exam language					
<b><u>SMSC</u></b>	The study of mathematics enables students to make sense of the world around them and we aim to enable each student to explore the connections between their numeracy skills and every-day life.					

<u>Year 8</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Number Recall Times tables Bidmas Place value Multiply numbers by single digit Add and subtract numbers with up to 4 digits Square numbers Cube numbers Negative numbers on scales 4 rules with negatives Short division Factors Long multiplication and division Rounding Prime numbers Multiply and divide by powers of 10	Simplifying Recognise next number in a sequence Substitute numbers into expressions plot coordinates in all 4 quadrants Give next value in sequence and describe how sequence built up Solve linear equation involving one operation Collect like terms Multiply terms Solve linear equations involving more than one operation Draw linear graph from table of values	Statistics Data cycle Shade in fraction of shape and identify fraction shaded Add and subtract fractions with same denominator Recognise equivalent fractions Cancel fractions Find a fraction of an integer Identify equivalent fractions, percentages, decimals for $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , tenths and fifths Add fractions with different denominators Order and compare fractions Find % of quantity Simplify a ratio Compare prices to find best buy	Geometry Draw charts and diagrams Interpret charts and diagrams Measures of average Plot coordinates Work out frequency from frequency table Probability scale Conversion graphs Calculate probability List outcomes of 2 events Correlation Speed, distance, time	Exam practise and Tell time using analogue and digital clocks Read scales with variety of divisions Identify standard metric units Measure and draw line accurately Round decimal numbers to 1,2,3 places Use four operations with decimals Convert from one metric unit to another Convert metric to imperial given conversion	Exam practise and Perimeter of 2D shape lines of symmetry Name 2D and 3D shapes Circle terminology Draw circle ; given radius/d Nets of 3D shapes Area of rectangle Rotational symmetry Measure and draw angles and lines Use fact angles at a point angles on a straight line Angles in triangles Angles in quadrilateral Area of triangle Reflection in a mirror line Volume of a cuboid Angles in parallel lines Area of parallelogram Area of trapezium Area and circumference of circles Translation Rotation Enlargement
<b><u>Literacy Focus</u></b> <b><u>Numeracy Focus</u></b>	Key words, vocabulary, worded question comprehension Exam language					
<b><u>SMSC</u></b>	The study of mathematics enables students to make sense of the world around them and we aim to enable each student to explore the connections between their numeracy skills and every-day life.					

<u>Year 9</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Number Recall Times tables Bidmas Place value Multiply numbers by single digit Add and subtract numbers with up to 4 digits Square numbers Cube numbers Negative numbers on scales 4 rules with negatives Short division Factors Long multiplication and division Rounding Prime numbers Multiply and divide by powers of 10	Simplifying Recognise next number in a sequence Substitute numbers into expressions plot coordinates in all 4 quadrants Give next value in sequence and describe how sequence built up Solve linear equation involving one operation Collect like terms Multiply terms Solve linear equations involving more than one operation Draw linear graph from table of values	Statistics Data cycle Shade in fraction of shape and identify fraction shaded Add and subtract fractions with same denominator Recognise equivalent fractions Cancel fractions Find a fraction of an integer Identify equivalent fractions, percentages, decimals for $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ , tenths and fifths Add fractions with different denominators Order and compare fractions Find % of quantity Simplify a ratio Compare prices to find best buy	Geometry Draw charts and diagrams Interpret charts and diagrams Measures of average Plot coordinates Work out frequency from frequency table Probability scale Conversion graphs Calculate probability List outcomes of 2 events Correlation Speed, distance, time	Exam practise and Tell time using analogue and digital clocks Read scales with variety of divisions Identify standard metric units Measure and draw line accurately Round decimal numbers to 1,2,3 places Use four operations with decimals Convert from one metric unit to another Convert metric to imperial given conversion	Exam practise and Perimeter of 2D shape lines of symmetry Name 2D and 3D shapes Circle terminology Draw circle ; given radius/d Nets of 3D shapes Area of rectangle Rotational symmetry Measure and draw angles and lines Use fact angles at a point angles on a straight line Angles in triangles Angles in quadrilateral Area of triangle Reflection in a mirror line Volume of a cuboid Angles in parallel lines Area of parallelogram Area of trapezium Area and circumference of circles Translation Rotation Enlargement
<b><u>Literacy Focus</u></b> <b><u>Numeracy Focus</u></b>	Key words, vocabulary, worded question comprehension Exam language					
<b><u>SMSC</u></b>	The study of mathematics enables students to make sense of the world around them and we aim to enable each student to explore the connections between their numeracy skills and every-day life.					

<b><u>Year 10 HIGHER</u></b>	<b><u>Autumn 1</u></b>	<b><u>Autumn 2</u></b>	<b><u>Spring 1</u></b>	<b><u>Spring 2</u></b>	<b><u>Summer 1</u></b>	<b><u>Summer 2</u></b>
<b><u>Areas of Study</u></b>	Use roots and indices Calculate with indices, and negative and fractional indices Use surds and calculate with surds, simplify terms and rationalise denominators Change terminating and recurring decimals to fractions Error intervals and upper and lower bounds	Understand vocabulary to do with algebra and ways of writing expressions Collect like terms Multiply terms Multiply out brackets Solve equations with more than 1 operation Find next term in sequence, express rule Nth term – find and use to generate sequence Substitute into equations Factorisation including factorising quadratics Solving quadratics by factorisation or using formula Nth term for quadratic sequence Recognise special sequences eg square, triangle no Plot in all 4 quadrants $Y=mx+c$ , including gradients and intercepts Parallel and perpendicular lines Quadratic graphs, gradients, intercepts, roots	Ratio, reduce to simple form, split amounts in given ratio Using standard units and decimals, convert between metric units and some imperial to metric conversion eg miles to Km Calculate fractions and percentages of integers Change mixed numbers to improper fractions Express one quantity as fraction of another Solve problems involving % change Compound interest Use scale factors, use ratio notation Use proportion – direct and inverse, including algebraic notation	Bar charts, pictograms, Frequency charts (Tally) Distance time graphs, calculate speed, conversion graphs Mean – including from frequency tables Median Mode Range Pie charts Stem and leaf including median, quartiles Scatter graphs, correlation, line of best fit Sampling Cumulative frequency, box plots Histograms	Identify 2D and 3D shapes and properties and nets including different triangles and quadrilaterals Use terminology to do with shapes, including circles Calculate perimeter of 2D shapes Calculate areas of rectangles, triangles, parallelograms, compound shapes, trapeziums Calculate volume of cuboids and prisms Calculate area and perimeter of circle Use Pythagoras Calculate volume and surface area of cylinders, spheres, cones, pyramids Calculate arc lengths and areas of sectors	Construct and measure circles, angles, lines Calculate angles at a point, angles on a line, angles in a triangle / quadrilateral Interior and exterior angles Angles in parallel lines Construct shapes, bisectors, loci, bearings Construct planes and elevations of 3D shapes Use terminology to do with circles Apply standard circle theorems Know simple trigonometric ratios and values for 0,30,45,60,90 Know and apply sine rule, cosine rule and $\frac{1}{2}$ absinc for triangle area
<b><u>Literacy Focus</u></b>	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension
<b><u>Numeracy Focus</u></b>						
<b><u>SMSC</u></b>	Providing links with the wider community and the world of work Experience curiosity					

<u>Year 11 FOUNDATION</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	<p>Apply four number operations to integers, negatives, decimals and fractions.</p> <p>BIDMAS</p> <p>Round to significant figures and decimal places.</p> <p>Estimation of answers</p> <p>Use calculators</p> <p>Prime numbers, factors, multiples, squares, cubes, roots, indices</p> <p>Prime factors</p> <p>HCF, LCM</p> <p>Indices rules</p> <p>Probability scale</p> <p>Probabilities add to 1</p> <p>Probability experiments</p> <p>Probability vocabulary</p> <p>Frequency trees, venn diagrams</p> <p>Sample space and 2 way tables</p> <p>Theoretical and actual probability</p> <p>Use probability trees for independent events and conditional probabilities</p>	<p>Rotate and reflect shapes</p> <p>Translate shapes using vectors</p> <p>Enlarge shapes including using fractional scale factors</p> <p>Combine rotations, reflections, enlargements</p> <p>Solve transformations on axes</p> <p>Add, subtract, multiply vectors</p> <p>Use diagrammatic and column vectors</p> <p>Mocks in Late Nov / early Dec</p>	<p>Use scale factors, use ratio notation</p> <p>Work out ratio problems</p> <p>Best buys</p> <p>Use proportion – direct and inverse</p> <p>Compare lengths, areas, volumes using ratios</p> <p>Identify congruent shapes – triangles SSS, SAS, ASA, RHS</p> <p>Identify congruency and similarity</p>	<p>Simultaneous equations</p> <p>Inequalities – show on number lines, solve</p> <p>Plot in all 4 quadrants</p> <p><math>Y=mx+c</math>, including gradients and intercepts</p> <p>Quadratic graphs, gradients, intercepts, roots</p>	<p>Practise papers, sample exam questions and answers, worked examples</p> <p>Revision of areas of concern.</p>	<p>Exam practise and exams</p>
<b><u>Literacy Focus</u></b> <b><u>Numeracy Focus</u></b>	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension	Key words, vocabulary, comprehension
<b><u>SMSC</u></b>	<p>Providing links with the wider community and the world of work</p> <p>Experience curiosity</p>					

<u>Year 11 Set 1</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<b>Areas of Study</b>	Number Proportion of a of a quantity Calculations with the four rules Types of numbers Powers of 10 Indices Calculations with fractions, decimals and percentages. Proportion – direct and inverse Proportions of quantities Equivalences between FDP Interest rates and depreciation Multiplying by powers of 10 and standard form BIDMAS	Simplifying Collecting like terms Forming expressions Solving linear equations Solving quadratics Factorising Expanding and simplifying Substitution into polynomials Index laws Inequalities Simultaneous equations Graphs of linear and quadratic functions Functions and inverse functions Iteration	Statistics Data cycle Mean Mode Median Range Cumulative frequency Scatter graphs	Geometry Properties of angles Constructions Transformations Circle properties Circle theorems Properties of polygons Interior and exterior angles	Exam practise and individual target setting	Exam practise and Exams
<u>Literacy Focus</u>  <u>Numeracy Focus</u>	Key words, vocabulary, worded question comprehension Exam language	Key words, vocabulary, worded question comprehension Exam language	Key words, vocabulary, worded question comprehension Exam language	Key words, vocabulary, worded question comprehension Exam language	Key words, vocabulary, worded question comprehension Exam language	Key words, vocabulary, worded question comprehension Exam language
<b><u>SMSC</u></b>	<p>The study of mathematics enables students to make sense of the world around them and we aim to enable each student to explore the connections between their numeracy skills and every-day life. Developing deep thinking and an ability to question the way in which the world works promotes the spiritual growth of students. Students are encouraged to see the sequences, patterns, symmetry and scale both in the man-made and the natural world and to use maths as a tool to explore it more fully. Pupils are provided with opportunities to use their maths skills in real life contexts. Problem solving skills and teamwork are fundamental to mathematics through creative thinking, discussion, explaining and presenting ideas. Students are always encouraged to explain concepts to each other and support each other in their learning. In this manner, students realise their own strengths and feel a sense of achievement which often boosts confidence. We hope that over time they become more independent and resilient learners.</p> <p>Mathematics is a universal language with cultural inputs from throughout the ages. We try to develop an awareness of both the history of maths alongside the realisation that many topics we still learn today have travelled across the world and are used internationally.</p>					



POST 16	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
GCSE Mathematics	Foundation: Number Multiplication, division, square and cube numbers.	Foundation: Algebra, equations, substitution, simplifying.  Geometry: Angle properties and problems.	Foundation: Fractions and decimals. Scale factors	Foundation: Statistics, simultaneous equations	Revision and exam practice	Revision and exam practice
Mathematics Functional Skills	Using Numbers and the number system	Using common measures, shape and space	Handling Information and data	Problem solving and underpinning skills	Revisions of key skills & examination practice	Revisions of key skills & examination practice
GCSE Statistics	Types of data vocabulary and data collection	Presentation of data, charts and graphs	Processing and interpretation of data	Probability	Comparison and analysis of charts and data	Revision and exams.