



## THE CURRICULUM OFFER

### Introduction

Welcome to the maths department at The Bulwell Academy.

#### ***We aim to encourage all our pupils to develop:***

- A positive attitude to mathematics, including self-confidence, enjoyment and determination
- An ability to understand mathematical ideas and to communicate them in a variety of different ways
- An ability to think mathematically - precisely, logically and creatively
- A willingness and ability to work both independently and within a group
- An appreciation of the interdependence of different branches of mathematics
- An awareness of the use of mathematics in other disciplines
- The knowledge, skills and understanding needed to apply a range of mathematical concepts to situations which may arise both inside school and the world beyond
- The skill to investigate mathematical ideas, and to test and prove their own hypotheses
- A firm foundation for further study of mathematics, or other subjects requiring a mathematical foundation
- An ability to use ICT, where appropriate, in their study of mathematics.

The ethos of the department is that mathematics includes all aspects of everyday life and, as such, we focus on the use of mathematics in the real world and problem solving in order to encourage our pupils to become independent learners in the subject.

Students who may find maths difficult are supported by Maths coaches or teacher assistants and can also benefit from interventions, including regular numeracy sessions during tutor time and, where appropriate, small group and one-to-one sessions.

We have a wealth and breadth of experience in the department, with our practitioners able to deliver personalised lessons which seek to engage, enthuse and encourage our learners to make rapid progress and achieve their potential.

As a school we have subscribed to the online learning platform [MyMaths.co.uk](http://MyMaths.co.uk), Edexcel Active Learn, Pixl Maths and Maths Watch, which students are encouraged to use to support their independent study. Students are expected to provide themselves with basic equipment including: pen, pencil and a ruler.

All year groups have homework set at least once a week and internal assessment occurs regularly at the end of each unit of work. Tests are set every half-term to assess progress. At the end of each year an examination paper/s is set to measure overall progress.





## THE CURRICULUM OFFER

### Numeracy

The maths department are at the heart of numeracy across the curriculum and are keen for their skills to be shared across the school. Numeracy skills are taught explicitly in all year groups. Forms tutors continue to complete numeracy activities during form time as well as specific numeracy coaching taking place within the maths department for targeted students once a week for each year group.

Our high achieving students in Years 7-10 sit the UKMT Mathematics Challenge each year. Last term, in total, there were five silver and fourteen bronze awards. This is a big improvement from last year and an increase of fourteen awards. The challenge focuses on problem solving which is good preparation for the new GCSE.

***At the end of their mathematical education in this school, each pupil will be able:***

- To perform basic numeracy skills
- To perform the basic mathematical skills needed in his/her chosen career or for entry to higher or further mathematical education
- To understand the mathematics likely to be encountered in daily adult life
- To reason clearly and logically, and to set out a rational argument
- To identify patterns encountered in diverse situations and to extrapolate from these
- To approach problems systematically, choosing appropriate techniques for their solution
- To follow logical instructions clearly expressed
- To experience satisfaction in and enjoyment of his/her mathematical achievements
- To obtain any formal mathematical qualifications needed for his/her chosen career
- To obtain his/her best possible results at KS3 and KS4.

### Maths Staff Team



#### Contact Us

To contact a member of Maths, please email:

[firstname.surname@bulwellacademy.org.uk](mailto:firstname.surname@bulwellacademy.org.uk)

Or telephone the school's reception on 0115 964 7640. Our Receptionist will take a message and ask the staff member to contact you when they are able.

Assistant Principal	Mr Younes Henini
Head of Department	Mr Dominic Hayton
Second in Department	Ms Sascha McLaren
Teacher of Mathematics	Ms Georgina Baxter Mrs Eleanor Hemsley Mr James Gibson (Vice Principal) Ms Gina Goldsmith Ms Lynn Saunders Dr Narinder Suri Mr Kamel Nouri Mr Cletus Bogba
Mathematics Coach	Mr Paul Platten



## THE CURRICULUM OFFER

### Key Stage 3 Curriculum (Years 7 & 8)

From September 2017 the year 7 are being taught a 'Mastery based' curriculum. This has been a new departure, and is driven by the department's determination to 'close the gap' for those entering the school with lower results in mathematics, while continuing to stretch those who are already able to handle the main concepts.

The latest GCSE exams are more challenging and demand a much deeper level of understanding and ability to explain reasoning in order to reach the highest grades. We believe that using the new approach to teaching in Key Stage 3 is the best way to prepare all students for the challenging new curriculum they are following.

We will monitor the effectiveness of the new programme of study in Year 7 and potentially roll it to year 8.

Year 7 Scheme of Work		
Half Term 1	Number - Place Value	Understand and use place value for decimals, measures and integers of any size.
		Order positive and negative integers, use the number line as a model for ordering of the real numbers; use the symbols =, ≠, <, >, ≤, ≥
		Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures]
	Number - Addition & Subtraction	Use formal written methods for addition and subtraction of integers and decimals.
		Recognise and use relationships between addition and subtraction including inverse operations.
		Calculate and solve problems involving perimeter
<b>Mid-Term 1 Holiday</b>		
Half Term 2	Number – Multiplication & Division	Multiply and divide by 10, 100 and 1000
		Use formal written methods for multiplication and division of integers and decimals.
		Use integer powers and associated real roots (square, cube and higher), recognise powers of 2, 3, 4, 5 and distinguish between exact representations of roots and their decimal approximations.
		Understand the order of operations.
		Use the concepts and vocabulary of prime numbers, factors, and highest common factor (HCF)
		Calculate and solve problems involving area of rectangles, triangles and parallelograms.
		Calculate the mean from a list of data.
<b>Christmas Holiday</b>		



## THE CURRICULUM OFFER

Year 7 Scheme of Work (continued)		
Half Term 3	Number - Fractions 1	Represent fractions using diagrams and on a number line.
		Express one quantity as a fraction of another.
		Identify and use equivalent fractions.
		Compare and order fractions; use the symbols =, ≠, <, >, ≤, ≥
		Convert between mixed numbers and improper fractions.
		Simplify fractions.
		Convert between fractions and decimals.
		Use the concepts and vocabulary of multiples and lowest common multiple (LCM).
		Add and subtract any fraction.
		Find a fraction of an amount.
<b>Mid-Term 2 Holiday</b>		
Half Term 4	Statistics 1	Understand the data handling cycle.
		Understand the different types of data.
		Collect, organise and interpret data.
		Draw and interpret bar charts, pictograms and line graphs.
	Number – Negative numbers	Use the four operations with negative numbers.
		Use the four operations with negative numbers.
		Use the four operations with negative numbers.
<b>Easter Holiday</b>		
Half Term 5	Algebra 1	Form expressions from situations described in words.
		Use and interpret algebraic notation
		Substitute numerical values into formulae and expressions, including scientific formulae. (Including negative numbers and fractions )
		Simplify and manipulate algebraic expressions to maintain equivalence.
		Use algebraic methods to solve simple linear equations in one variable where the unknown appears on one side of the equation.
		Generate terms of a sequence from either a term-to-term or a position-to-term rule.
		Recognise arithmetic sequences and find the nth term.



## THE CURRICULUM OFFER

### Year 7 Scheme of Work (continued)

#### Mid-Term 3 Holiday

<b>Half Term 6</b>	Geometry – Lines & Angles	Describe, sketch and draw using conventional terms and notations
		Derive and illustrate properties of triangles, quadrilaterals, circles, and other plane figures
		Use a protractor to measure and draw angles.
		Apply the properties of angles at a point, angles at a point on a straight line, vertically opposite angles.
		Understand and use alternate and corresponding angles on parallel lines.
		Derive and use the sum of angles in a triangle and a quadrilateral.
		Derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons.

#### Summer Holiday

### Year 8 Scheme of Work

	8 Foundation	8 Intermediate	8 Higher
<b>Half Term 1</b>	N1.2 Multiplying whole numbers N2.2 Writing and ordering decimals N2.3 Multiplying and dividing by powers of 10 N3.2 Rounding larger numbers N7.2 Factors, primes and powers (A2.1 What is a sequence) covered in year 7, review if necessary. GM2.3 Angle facts, met in year 7, postpone algebra until A1.3 done. within number, sequences and shape	N2.3 Multiplying and dividing by powers of 10 N7.2 Factors, primes and powers N1.5 Adding and subtracting negative numbers N1.6 Multiplying and dividing negative numbers A2.2 Generating sequences GM2.5 Angles in triangles and quadrilaterals, possibly postpone algebra until A1.4 complete. within number, sequences and shape	N1.7 Order of operations BIDMAS A2.3 Linear sequences GM2.6 Types of quadrilateral GM2.7 Angles and parallel lines within number, sequences and shape

#### Mid-Term 1 Holiday



## THE CURRICULUM OFFER

Year 8 Scheme of Work (continued)			
	8 Foundation	8 Intermediate	8 Higher
Half Term 2	SP2.3 Vertical line charts SP2.4 Pie charts A1.1 Making and using word formulae (A1.2 Using letters) to support A1.3 if required. N4.2 Finding equivalent fractions N1.4 Dividing whole numbers (N7.3 Divisibility tests can be included here) GM6.1 Properties of 3-D shapes GM6.2 Understanding nets	SP2.2 Stem and leaf diagrams SP1.1 Mode, median and range SP1.2 Using mean, median, mode and range SP3.1 Collecting data A1.3 Combining variables N4.3 Multiplying fractions N7.3 Divisibility tests GM4.2 Constructions with a ruler and protractor GM2.4 Rotational symmetry GM2.6 Types of quadrilateral GM6.1 Properties of 3-D shapes GM6.2 Understanding nets	SP2.6 Scatter diagrams A1.5 Setting up and solving simple equations A1.6 Using brackets N4.4 Adding and subtracting fractions N4.5 Working with mixed numbers N4.6 Dividing fractions GM4.3 Constructions with a pair of compasses GM6.2 Understanding nets
<b>Christmas Holiday</b>			
Half Term 3	A1.2 Using letters N1.3 Adding and subtracting decimals GM1.5 Interpreting scales N3.3 Rounding decimals to the nearest integer	A1.4 Working with formulae A3.1 Real life graphs N1.7 Order of operations BIDMAS GM1.5 Interpreting scales GM1.8 Bearings	A3.2 Plotting graphs of linear functions N1.8 Multiplying decimals N1.9 Dividing decimals GM1.8 Bearings GM3.3 Circumference
<b>Mid-Term 2 Holiday</b>			
Half Term 4	A1.3 Combining variables (N4.2 Finding equivalent fractions to support probability if necessary) GM1.6 The metric system N6.1 Understanding ratio notation (all can do this) GM5.2 Cartesian coordinates in four quadrants GM5.3 Translation	A1.5 Setting up and solving simple equations A1.6 Using brackets SP4.1 Introduction to Probability SP4.2 Single event probability N2.5 Using the number system effectively N6.1 Understanding ratio notation (all can do this) GM5.5 Rotation	A1.7 Working with more complex equations A1.8 Solving equations with brackets SP4.3 Combined events N6.1 Understanding ratio notation (all can do this) N6.2 Sharing in a given ratio N6.3 Working with proportional quantities GM1.7 Metric-imperial conversions (link with N6.3) GM1.9 Scale drawing GM5.6 Enlargement
<b>Easter Holiday</b>			



## THE CURRICULUM OFFER

Year 8 Scheme of Work (continued)			
	8 Foundation	8 Intermediate	8 Higher
Half Term 5	(N7.2 Factors, primes and powers)	N7.4 Index notation	N7.4 Index notation
	N7.4 Index notation	A2.3 Linear sequences	A2.4 Special sequences
	N1.5 Adding and subtracting negative numbers	GM3.2 Finding area and perimeter	GM6.3 Volume and surface area of cuboids
	A1.4 Working with formulae	GM6.2 Understanding nets	A4.1 Trial and improvement
	A2.2 Generating sequences	A4.1 Trial and improvement	
	GM3.1 Understanding area		
	GM6.1 Properties of 3-D shapes		
	A1.5 Setting up and solving simple equations		
<b>Mid-Term 3 Holiday</b>			
Half Term 6	SP1.1 Mode, median and range	SP3.1 Collecting data	S3.2 Designing a questionnaire
	SP1.2 Using mean, median, mode and range	SP1.3 Using frequency tables	S1.4 Using grouped frequency tables
	SP2.2 Stem and leaf diagrams	N3.4 Rounding decimals	S2.5 Displaying grouped data
	N5.1 Understanding and using percentages	N5.3 Converting between fractions, decimals and percentages	N5.4 Applying percentage increases and decreases to amounts
	N5.2 Calculating percentages of quantities	GM6.3 Volume and surface area of cuboids	GM6.4 2-D representations of 3-D shapes
	GM2.4 Rotational symmetry		
	GM6.2 Understanding nets		
	<b>Summer Holiday</b>		

### Key Stage 4 Curriculum (Years 9, 10 & 11)

- We begin teaching the Key Stage 4 curriculum in Year 9, allowing three years to complete the course. Students follow the curriculum appropriate for their ability leading to mathematics GCSE taken at Foundation (New GCSE Grades 1 to 5) or Higher (Grades 4 to 9) in the summer of Year 11, taught in 4 lessons per week in groups based on ability.
- Students currently sit exams from OCR, the GCSE qualification is [Mathematics \(J560\)](#), sat at Higher or Foundation Level. In addition some students who struggle with the GCSE may be entered for the AQA [Entry Level Certificate in Mathematics \(5930\)](#).
- For more information regarding Key Stage 4, please view the Mathematics Course outline on the Guided Learning Pathway page of our website: [Making Choices in Year 8](#)



## THE CURRICULUM OFFER

### Exam Board and Qualifications

- Our GCSE qualifications are set by the OCR exam board.
- [Entry Level Certificate in Mathematics \(5930\)](#) (AQA)
- [Ofqual document comparing 'Old' and 'New' GCSE grades](#)

### Links to Learning

- [OCR](#)
- [PIXL MathsAPP](#)
- [MyMaths.co.uk](#)
- [Maths watch](#)
- [Mathematics ACTIVE learn](#)
- [NRICH](#)
- [UKMT](#)
- [BBC Bitesize](#)

OCR's GCSE (9–1) in Mathematics (J560)		
Learners are entered for either <b>Foundation tier</b> (Paper 1, Paper 2 and Paper 3) or <b>Higher tier</b> (Paper 4, Paper 5 and Paper 6).		
Qualification Overview	Assessment Overview	
Foundation tier, grades 5 to 1		
Paper 1 (Foundation tier) J560/01	Written paper 100 marks 1 hour 30 minutes Calculator permitted	33 1/3 % of total GCSE
Paper 2 (Foundation tier) J560/02	Written paper 100 marks 1 hour 30 minutes Calculator not permitted	33 1/3 % of total GCSE
Paper 3 (Foundation tier) J560/03	Written paper 100 marks 1 hour 30 minutes Calculator permitted	33 1/3 % of total GCSE
Higher tier, grades 9 to 4		
Paper 4 (Higher tier) J560/04	Written paper 100 marks 1 hour 30 minutes Calculator permitted	33 1/3 % of total GCSE
Paper 5 (Higher tier) J560/05	Written paper 100 marks 1 hour 30 minutes Calculator not permitted	33 1/3 % of total GCSE
Paper 6 (Higher tier) J560/06	Written paper 100 marks 1 hour 30 minutes Calculator permitted	33 1/3 % of total GCSE





## THE CURRICULUM OFFER

Year 9 Scheme of Work			
	9 Foundation	9 Intermediate	9 Higher
Half Term 1	A3.1 Real-life graphs SP1.3 Using frequency tables GM3.2 Finding area and perimeter N2.5 Using the number system effectively within graphs, statistics, measures and decimals	A3.2 Plotting graphs of linear functions SP3.2 Designing a questionnaire SP2.6 Scatter diagrams GM3.3 Circumference N1.8 Multiplying decimals N1.9 Dividing decimals within graphs, statistics, measures and decimals	A3.3 The equation of a straight line SP1.4 Using grouped frequency tables SP2.5 Displaying grouped data GM3.4 Area of circles N2.6 Writing numbers in standard form within graphs, statistics, measures and decimals
<b>Mid-Term 1 Holiday</b>			
Half Term 2	(A1.5 Setting up and solving simple equations) A1.6 Using brackets N1.7 BIDMAS GM3.3 Circumference N4.3 Multiplying fractions N5.3 Converting between fractions, decimals and percentages	A1.7 Working with more complex equations A1.8 Solving equations with brackets GM3.4 Area of circles N5.4 Applying percentage increases and decreases to amounts	A1.9 Simplifying harder expressions GM3.5 Pythagoras' theorem N5.5 Finding the percentage change from one amount to another N5.6 Reverse percentages
<b>Christmas Holiday</b>			
Half Term 3	A1.7 Working with more complex equations GM 2.5 Angles in triangles and quadrilaterals GM 2.6 Types of quadrilateral N7.4 Index notation (all can attempt this) SP1.3 Using frequency tables SP2.2 Stem and leaf diagrams	A4.1 Trial and improvement GM 2.7 Angles and parallel lines GM1.8 Bearings N7.4 Index notation (all can attempt this) SP1.4 Using grouped frequency tables	A4.2 Linear inequalities GM2.8 Angles in a polygon N7.5 Prime factorisation SP1.5 Interquartile range SP2.5 Displaying grouped data
<b>Mid-Term 2 Holiday</b>			
Half Term 4	N1.6 Multiplying and dividing negative numbers A2.3 Linear sequences (A3.2 Plotting graphs of linear functions) GM6.3 Volume and surface area of cuboids N6.1 Understanding ratio notation	A2.4 Special sequences A3.3 The equation of a straight line GM6.4 2-D representations of 3-D shapes N4.5 Working with mixed numbers GM1.7 Metric-imperial conversions N6.3 Working with proportional quantities	A2.5 Quadratic sequences A3.4 Plotting quadratic and cubic graphs GM6.5 Prisms GM1.10 Compound units N6.4 The constant of proportionality
<b>Easter Holiday</b>			



## THE CURRICULUM OFFER

Year 9 Scheme of Work (continued)			
	9 Foundation	9 Intermediate	9 Higher
Half Term 5	A3.2 Plotting graphs of linear functions N3.4 Rounding decimals GM1.7 Metric-imperial conversions GM1.8 Bearings GM4.2 Constructions with a ruler and protractor	A4.2 Linear inequalities N3.5 Significance GM1.9 Scale drawing GM4.3 Constructions with a pair of compasses	A4.3 Solve pairs of equations by substitution A4.4 Solve simultaneous equations using elimination A4.5 Using graphs to solve simultaneous equations N3.6 Approximating N3.7 Limits of accuracy GM4.4 Loci
<b>Mid-Term 3 Holiday</b>			
Half Term 6	N6.3 Working with proportional quantities (A1.4 Working with formulae) (A1.5 Setting up and solving simple equations) (A1.6 Using brackets) (A1.7 Working with more complex equations) A1.8 Solving equations with brackets GM5.4 Reflection GM5.5 Rotation SP4.1 Introduction to probability SP4.2 Single event probability	N6.2 Sharing in a given ratio A1.9 Simplifying harder expressions GM5.6 Enlargement SP4.3 Combined events N4.4 Adding and subtracting fractions N4.6 Dividing fractions	N6.5 Working with inversely proportional quantities A1.10 Using complex formulae GM5.7 Similarity GM5.8 Trigonometry SP4.4 Estimating probability
<b>Summer Holiday</b>			

Year 10 Scheme of Work			
	10 Foundation	10 Intermediate	10 Higher
Half Term 1	N1.8 Multiplying decimals (N2.3 Multiplying and dividing by powers of 10) (N2.5 Using the number system effectively) (A3.2 Plotting graphs of linear functions) A3.3 The equation of a straight line (A1.6 Using brackets) (GM6.3 Volume and surface area of cuboids) (N5.3 Converting between fractions, decimals and percentages) N5.4 Applying percentage increases and decreases to amounts	N2.6 Writing numbers in standard form N3.6 Approximating A3.4 Plotting quadratic and cubic graphs GM1.10 Compound units N5.5 Finding the percentage change from one amount to another	N2.7 Calculating with standard form N7.6 Rules of indices A3.6 Quadratic equations A5.1 Factorising quadratics A5.2 Solve equations by factorising GM6.6 Enlargement in two and three dimensions GM5.10 Finding centres of rotation N5.7 Repeated percentage increase/decrease A2.6 Geometric progressions



## THE CURRICULUM OFFER

Year 10 Scheme of Work (continued)			
	10 Foundation	10 Intermediate	10 Higher
Half Term 2	(GM2.5 Angles in triangles and quadrilaterals) GM 2.7 Angles and parallel lines (SP2.3 Vertical line charts) (SP2.4 Pie charts) (GM6.2 Understanding nets) GM6.4 2-D representations of 3-D shapes N1.9 Dividing decimals	GM2.8 Angles in a polygon GM6.5 Prisms SP2.6 Scatter diagrams	GM2.9 Congruent triangles and proof GM2.10 Proof using similar and congruent triangles GM5.9 Trigonometry for special angles SP2.7 Using lines of best fit GM6.6 Enlargement in two and three dimensions GM6.7 Constructing plans and elevations GM1.11 Working with compound units
<b>Christmas Holiday</b>			
Half Term 3	(A1.5 Setting up and solving simple equations) (A1.7 Working with more complex equations) N4.4 Adding and subtracting fractions N4.5 Working with mixed numbers (GM3.2 Finding area and perimeter) (GM6.3 Volume and surface area of cuboids) GM6.5 Prisms (GM5.5 Rotation)	A3.6 Quadratic equations A1.9 Simplifying harder expressions GM5.10 Finding centres of rotation	A3.5 Finding equations of straight lines A3.7 Polynomial and reciprocal functions A1.11 Identities GM3.6 Arcs and sectors GM6.8 Surface area and volume of 3-D shapes GM7.1 Vectors
<b>Mid-Term 2</b>			
Half Term 4	(N4.3 Multiplying fractions) (SP4.2 Single event probability) SP4.3 Combined events (N1.7 BIDMAS) (N2.6 Writing numbers in standard form) A3.4 Plotting quadratic and cubic graphs (GM3.3 Circumference) GM3.4 Area of circles	SP4.4 Estimating probability N2.7 Calculating with standard form A1.10 Using complex formulae A3.7 Polynomial and reciprocal functions N7.5 Prime Factorisation	SP4.5 The multiplication rule SP4.6 The addition rule N7.7 Fractional indices A1.12 Using indices in Algebra N5.8 Growth and decay A3.10 Exponential functions N7.8 Surds
<b>Easter Holiday</b>			



## THE CURRICULUM OFFER

Year 10 Scheme of Work (continued)			
	10 Foundation	10 Intermediate	10 Higher
Half Term 5	GM5.6 Enlargement (A2.3 Linear sequences) A2.4 Special sequences (N3.4 Rounding decimals) N3.5 Significance (GM2.6 Types of quadrilaterals) G2M2.8 Angles in a polygon	GM5.7 Similarity A2.5 Quadratic sequences A2.6 Geometric progressions N7.6 Rules of indices GM2.9 Congruent triangles and proof	GM5.12 Enlargement with negative scale factors A2.7 Other sequences A2.8 Nth term of quadratic sequences N2.8 Recurring decimals N3.8 Upper and lower bounds GM2.11 Circle theorems
<b>Mid-Term 3</b>			
Half Term 6	(A3.3 The equation of a straight line) (A3.4 Plotting quadratic and cubic graphs)	A4.3 solve pairs of simultaneous equations by substitution A4.4 Solve simultaneous equations by elimination	A3.8 Perpendicular lines A4.6 Solving linear inequalities in two variables
<b>Summer Holiday</b>			

Year 11 Scheme of Work			
	11 Foundation	11 Intermediate	11 Higher
Half Term 1	(N4.3 Multiplying fractions) N4.6 Dividing fractions (N5.3 Converting between fractions, decimals and percentages) N5.4 Applying percentage increases and decreases to amounts GM6.6 Enlargement in 2 and 3 dimensions (A1.5 Setting up and solving simple equations) (A1.7 Working with more complex equations) GM5.6 Enlargement GM5.7 Similarity (A1.8 Solving equations with brackets) (GM1.8 Bearings)	A5.1 Factorising quadratics A5.2 Solve equations by factorising N5.5 Finding the percentage change from one amount to another GM3.5 Pythagoras' theorem GM3.6 Arcs and sectors A1.9 Simplifying harder expressions A4.5 Using graphs to solve simultaneous equations GM5.8 Trigonometry GM5.9 Trig for special angles	A5.3 Factorising harder quadratics A5.4 Completing the square A5.5 The quadratic formula N5.7 Repeated percentage increase/decrease GM3.7 The cosine rule GM3.8 The sine rule A1.11 Identities GM5.12 Enlargement with negative scale factors A5.6 Simultaneous equations with quadratics A3.12 Circular functions A1.13 Manipulating more expressions and equations A3.11 trig functions
<b>Mid-Term 1 Holiday</b>			



## THE CURRICULUM OFFER

Year 11 Scheme of Work (continued)			
	11 Foundation	11 Intermediate	11 Higher
Half Term 2	N6.2 Sharing in a given ratio (GM2.5 Angles in triangles and quadrilaterals) GM 2.7 Angles and parallel lines GM1.9 Scale drawing (GM4.2 Constructions with a ruler and protractor) (SP1.3 Using frequency tables) SP1.4 Using grouped frequency tables	N6.4 The constant of proportionality N5.6 Reverse percentages GM2.8 Angles in a polygon GM4.4 Loci SP2.5 Displaying grouped data	A1.14 Rearranging more formulae A4.7 Solving equations numerically GM2.9 Congruent triangles and proof GM2.10 Proof using similar and congruent triangles GM5.11 Combining transformations A6.2 Translations and reflections of functions. SP2.8 Histograms
<b>Christmas Holiday</b>			
Half Term 3	Rounding decimals N3.6 Approximating GM1.10 Compound units (GM5.3 Translations) (A3.1 Real life graphs) (GM2.6 Types of quadrilaterals) G2M2.8 Angles in a polygon (N6.3 Working with proportional quantities)	Rounding decimals N3.7 Limits of accuracy GM7.1 Vectors A1.11 Identities GM2.9 Congruent triangles and proof N6.5 Working with inversely proportional quantities	Rounding decimals A6.1 Using chords and tangents A6.3 Area under non-linear graphs GM7.2 Proof with vectors A3.9 Inverse and composite functions A4.8 Proving general results GM2.11 Circle theorems N6.6 Formulating equations to solve proportion problems
<b>Mid-Term 2 Holiday</b>			
Half Term 4	N4.4 Adding and subtracting fractions N4.5 Working with mixed numbers (GM2.9 Congruent triangles and proof) Try it... (GM3.2 Finding area and perimeter) (GM6.3 Volume and surface area of cuboids) GM6.5 Prisms N5.5 Finding the percentage change from one amount to another (SP 4.4 Estimating probability)	A1.9 Simplifying harder expressions GM2.10 Proof using similar and congruent triangles GM6.8 Surface area and volume of 3-D shapes N5.7 Repeated percentage increase/decrease SP4.6 The addition rule	A1.11 Identities GM5.13 Trig in 2-D and 3-D GM6.9 Area and volume in similar shapes GM3.6 Arcs and sectors A5.7 Solving quadratic inequalities SP4.7 Conditional probability
<b>Easter Holiday</b>			
Half Term 5	Revision and Exams	Half Term 6	Exams
<b>Summer Holiday</b>			