

Subject: Maths		Developed by: T Lunel	Date: 19/5/2022
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Overall department INTENT

The Maths Department at BGN aims to teach all students how to use numbers effectively in everyday life as well as equipping them with the skills to gain GCSE Maths in Year 11.

Year 9 INTENT

We are guided by four underlying principles: high expectations for every child; depth before breadth; number sense and place value come first; problem solving at the heart of the subject."

IMPLEMENTATION

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Solve word problems (add and subtract)	Explain and investigate (multiply and divide)	Geometry	Fractions	Applications of algebra	Percentage and statistics
	Place value (including decimals)	Factors and multiples	Draw and measure angles	Equivalent fractions	Order of applications	Construct and interpret statistical diagrams including pie charts
	Add and subtract (including decimals)	Multiply and divide (including decimals)	Find unknown angles (straight lines, at a point, vertically opposite)	Compare and order fractions and decimals	Substitution	Convert between percentages, vulgar fractions and decimals
	Rounding	Area of rectangle, triangle and parallelogram	Properties of triangles and quadrilaterals	Change mixed numbers to improper fractions and vice versa	Form and simplify algebraic expressions	Expand over a single bracket and factorise
	Perimeter	Calculate the mean	Unit conversions (linear)	Fraction of a quantity	Sequences (term-to-term, not nth term)	Percentage of a quantity
	Mental strategies	Further mental strategies	Symmetry and	Multiply and divide fractions		Find the whole, given the part and the percentage

Year 8 INTENT						
To teach the Year 8 content of the Maths Mastery curriculum						
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IMPLEMENTATION						
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6

	Number	Algebraic expressions	Geometry	Proportional Reasoning	Geometry	Statistics
	Primes & indices	Order & calculate with negative numbers	Construct triangles & quadrilaterals	Percentage increase & decrease, including multipliers	Use of significant figures and estimation	Collect & organise data, including surveys
	Prime factorisation, squares & cubes	Form & solve linear equations (unknowns on one side)	Calculate unknown angles (including parallel lines)	Reverse percentage problems	Circumference & area of a circle	Interpret & compare statistical representations
	Use of Venn diagrams to find HCF and LCM	Use more complex algebraic expressions	Unit conversions (including area)	Ratio (equivalent, of a quantity) and rate	Visualise & identify 3D shapes and their nets	Mean, mode & median averages
	Add & subtract fractions	Linear sequences: nth term rule	Area of a trapezium	Scaling and multipliers	Volume of a cuboid, prism, cylinder and composite solids	Range & outliers
			Areas & perimeters of composite figures	Speed, distance, time	Surface area	

Year 9 INTENT						
To teach the Year 9 content of the Maths Mastery curriculum	TERM 1 Graphs & Proportion	TERM 2 Algebraic Expressions	TERM 3 Geometry	TERM 4 Equations & Inequalities	TERM 5 Geometry	TERM 6 Statistics
	Cartesian coordinates including midpoint of a line segment Linear graphs Direct & inverse proportion Calculate with scales Standard form	Sequences including arithmetic & geometric Expand binomials & factorise simple quadratics Change the subject of familiar formulae	Construction and loci Congruence and similarity Angles in polygons Properties of shapes Bearings	Construct & solve equations & inequalities Graphical solutions of simultaneous equations Quadratics and other graphs	Pythagoras' theorem Transformations (translation, rotation, reflection and enlargement) Use known angle and shape facts to obtain simple proofs Probability	Mean of grouped data Compare two data sets Histograms Cumulative frequency graphs and box plots Scatter graphs Exploring trigonometry

Year 10 INTENT						
Year 10 INTENT						
To teach the Year 10 content of the AQA GCSE Higher Maths curriculum						
To teach the Year 10 content of the AQA GCSE Higher Maths curriculum	Scale diagrams & bearing	graphs	Perimeter & area	Properties of polygons	Basic probability	Calculating with percentages
	Basic number	Basic decimals	Circumference & area of circles	Equations	Transformations	Measures
	Factors & multiples	Rounding	Real life graphs	Indices	Congruence & similarity	Statistical measures
	Basic algebra	Collecting & representing data		Standard form	2D representations of 3D shapes	Constructions & loci
	Basic fractions	Sequences				

IMPLEMENTATION						
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6

	Angles scale	Rounding	Perimeter & area	Equations	Transformations	Calculating with percentages
Year 11 INTENT						
To teach the Year 11 content of the AQA GCSE Foundation Maths curriculum						
	Basic number, factors & multiples Basic algebra Fractions & decimals Coordinates & linear graphs	representing data Sequences Basic percentages	area of circles Real life graphs Ratio & proportion Properties of polygons	Surds Basic probability Standard form Measures	Congruence & similarity 2D representations of 3D shapes	Statistical measures Construction & loci

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
	Probability	Inequalities	Trigonometry	Solving quadratics	Revision	Revision
	Volume	Pythagoras' theorem	Sketching graphs	Quadratic graphs		
	Algebra: quadratics, identities & rearranging formulae	Simultaneous equations	Direct & inverse proportion	Growth & decay		
	Scatter graphs	Algebra & graphs		Vectors		
		Mock exams		Mock exams		

IMPLEMENTATION						
	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6

	Probability	Scatter graphs	Sketching graphs	Growth & decay	Gradients & rates of change	Revision
Year 11 INTENT						
To teach the Year 11 content of the AQA GCSE Higher Maths curriculum	Volume	Further equations & graphs	Direct & inverse	Vectors	Change	
	Algebra: quadratics, rearranging formulae and identities Pythagoras' theorem & basic trigonometry	Simultaneous equations Circle theorems Mock exams	proportion Inequalities Numerical methods Equation of a circle	Transforming functions Sine & cosine rules Algebraic fractions Mock exams	Pre-calculus & area under a curve Revision	