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

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 8 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	
Rounding	Area of rectangle, triangle and parallelogram		Change mixed numbers to improper fractions and vice versa	Form and simplify algebraic expressions	Convert between percentages, vulgar fractions and decimals
Perimeter	Calculate the mean	Properties of triangles and quadrilaterals		Expand over a single bracket and factorise	
Mental strategies	Further mental strategies	Unit conversions (linear)	Fraction of a quantity	Sequences (term-to-term, not nth term)	Percentage of a quantity
		Symmetry and	Multiply and divide fractions		Find the while, 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	

IMPLEMENTATION

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	Sequences including arithmetic & geometric	Construction and loci	Construct & solve equations & inequalities	Pythagoras' theorem	Mean of grouped data
Linear graphs	Expand binomials & factorise simple quadratics	Congruence and similarity	Graphical solutions of simultaneous equations	Transformations (translation, rotation, reflection and enlargement)	Compare two data sets
Direct & inverse proportion	Change the subject of familiar formulae	Angles in polygons	Quadratics and other graphs	Use known angle and shape facts to obtain simple proofs	Histograms
Calculate with scales		Properties of shapes			Cumulative frequency graphs and box plots
Standard form		Bearings		Probability	Scatter graphs
					Exploring trigonometry

IMPLEMENTATION

Year 10 INTENT					

To teach the Year 10 content of the AQA GCSE Foundation Maths curriculum.

To teach the Year 10 content of the AQA GCSE Higher Maths curriculum.

Coordinates & linear graphs		Basic percentages	Ratio & proportion	Basic probability	Calculating with percentages
Scale diagrams & bearing	graphs	Perimeter & area	Properties of polygons	Transformations	
Basic number	Basic decimals	Circumference & area of circles	Equations	Congruence & similarity	Measures
Factors & multiples	Rounding	Real life graphs	Indices	2D representations of 3D shapes	Statistical measures
Basic algebra	Collecting & representing data		Standard form		Constructions & loci
Basic fractions	Sequences				

MPLEMENTATION					
Term 1	**Term 2**	**Term 3**	**Term 4**	**Term 5**	**Term 6**

Angles, scale diagrams & bearings	Rounding	Perimeter & area	Equations	Transformations	Calculating with percentages

To teach the Year 11 content of the AQA GCSE Foundation Maths curriculum

	Collecting &	Circumference &	Indices	Congruence &	
Basic number, factors & multiples	representing data	area of circles		similarity	Statistical measures
			Surds		
Basic algebra	Sequences	Real life graphs		2D representations	Construction & loci
			Basic probability	of 3D shapes	
Fractions & decimals	Basic percentages	Ratio & proportion			
			Standard form		
Coordinates & linear graphs		Properties of polygons	Measures		

IMPLEMENTATION

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

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

To teach the Year 11 content of the AQA GCSE Higher Maths curriculum

	Volume	Further equations & graphs	Direct & inverse proportion	Vectors	Pre-calculus & area under a curve	
	Algebra: quadratics, rearranging formulae and identities	Simultaneous equations	Inequalities	Transforming functions	Revision	
	Pythagoras' theorem & basic trigonometry	Circle theorems	Numerical methods	Sine & cosine rules		
		Mock exams	Equation of a circle	Algebraic fractions		
				Mock exams		