Carmel College Curriculum Implementation – KS4 Foundation   Long term plan   Subject **Mathematics**

	Year 10	Year 11

Autumn half term 1 Sequential knowledge and skills	Number
	    Significant Figures
	    Fractions Decimals and Percentages
	    4 operations with fractions
	    Rules of Indices
	    Standard Form
	    Product of Primes, LCM and HCF
	
	Start Ratio, Percentages Similar Shapes and Trig
	    Ratio
	    Compound and Simple Interest
		Complete Shape and Space
		    Volume
		    Converting Metric Area and Volume
		    Plans and Elevations
		
		Number
		    Upper and Lower Bounds
		
		Compound Measures
		    Speed, Density, Pressure
		
		Start Algebra 2
		    Inequalities – linear

Assessment Content and methods used to judge learning	Test - number	Test -shape and space, number, compound measures

Autumn half term 2 Sequential knowledge and skills	Complete Ratio, Percentages Similar Shapes and Trig
	
	    Percentages & Reverse Percentages
	    Lengths of Similar Shapes
	    Enlargement
	    Trigonometry in Right Angled Triangles (depending on set)
	
	 Straight Line Graphs
	    Straight line graphs using y = mx+c, parallel lines, interpreting gradient and y intercept in context
	    Midpoints of lines
		Complete Algebra 2
		    Linear Simultaneous Equations – graphically and (depending on set) algebraically
		
		Revision for Mock exams
		
		Start Proportion and Graphs
		    Direct and Indirect Proportion

Assessment Content and methods used to judge learning	Test – Ratio Test Graphs	Test – Algebra 2 Mock Exams

Spring half term 3 Sequential knowledge and skills	Calculations
	    Non-Calculator techniques – long division and multiplication, estimation, best buys
	
	Start Algebra 1
	    Expanding 1 bracket and Linear Factorising
	    Substitution
	    Solving Linear Equations
		Complete Proportion and Graphs
		    Quadratic, Cubic and Reciprocal Graphs
		    Identifying different types of graphs
		
		Sequences and Proof
		
		Probability
		
		Vectors

	Year 10	Year 11
Assessment Content and methods used to judge learning	Test -Calculations	Exam Paper

Spring half term 4 Sequential knowledge and skills	Continue Algebra 1
	    Expanding 2 brackets
	    Factorising quadratic expressions
	    Solving Quadratic Equations by factorising
	    Rearranging Formulae
	
	Start Geometry
	    Angles on parallel lines, polygons, triangles and geometrical reasoning
	    Bearings
		Revision until exams

Assessment Content and methods used to judge learning	Algebra Test	Exam Paper

Summer half term 5 Sequential knowledge and skills	Complete Geometry
	    Constructions and Loci
	    Scales and Scale drawings
	    Geometrical Proof
	    Transformations -rotations, reflections translations and combinations of these
	
	Start Statistics
	    Sampling
	    Representing and Interpreting Data
	Revision for End of Year exam
		Revision

Assessment Content and methods used to judge learning	Geometry Test	

Summer half term 6 Sequential knowledge and skills	End of Year exams
	
	Complete statistics
	    Comparing Data
	    Averages
	    Bivariate data
	
	Start Shape and Space
	    Area and surface area
		Exams

Assessment Content and methods used to judge learning Assessment	End of Year Exam Statistics Test	GCSE Exam

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