Department of Mathematics
GCSE Mthematics - Higher Tier
Two Year Scheme of Work

TOWNSEND — CHURCH OF ENGLAND SCHOOL

	Week	10 Higher	11 Higher
Autumn 1	1	**UNIT 1** **Fractions, Types of Numbers, HCF and LCM, Indices, Surds, Decimals** (Calculating with FDP, Types of Numbers inc. Primes, Squares, Roots and Cubes, HCF and LCM, Product of Primes, Simplifying Surds, Rationalise the Denominator, Fractional & Neg Indices,Decimal Divisions, Standard Form) **Recurring Decimal conversion**	**Unit 1** **Further Trigonometry** (3D, Trig Graphs, Sine, Cosine, 0.5abSinC) **Bearings**
	2		
	3		**Unit 2** **Area & Volume** (Circles, Sectors, Segments, Surface Area, Volume, Enlargements)
	4		
	5		
	6		
Autumn 2	7	**Half Paper Calculator (Week 7)**	**Full Paper Calculator (Week 7)**
	8	**UNIT 2** **Expressions** **& Identities** (Simplifying, Brackets, Factorising, Proof)	**Unit 3** **Measures &** **Real Life Graphs** (Speed, Density, Pressure, Speed Time Graphs)
	9		
	10		
	11	**UNIT 3** **Circle Theorems**	**Trial Exam Paper 1** **Non - Calculator (Week 11)**
	12		**Trial Exam Paper 2** **Calculator (Week 12)**
Spring 1	13	**Full Paper Non - Calculator (Week 13)**	**Unit 4** **Equations & Inequalities** (Quadratic Simultaneous Equations, Solving by Iteration, Graphing Inequalities)
	14	**UNIT 4** **Estimating, Error Intervals and Bounds** (Significant Figures, Estimating Error Intervals, Bounds of Calcs)	
	15		
	16	**UNIT 5** **Formulae,** **Simultaneous Equations,** **Sequences**	**Unit 5** **Non Linear Graphs** **& Functions** (Types of Graphs, Inverse, Composite Functions)
	17		
	18		
	19		
Spring 2	20	**Half Paper Calculator (Week 20)**	**Unit 6** **Further Stats & Probability** (Histograms, Harder Tree Diagrams)
	21	**UNIT 6** **Stats & Probability** (Averages, CF, Box Plots, Tree Diagrams) **Mutually Exclusive Events and Independent Events (R)**	
	22		
	23	**UNIT 7** **Quadratics** (Solving 3 ways, Plotting Graphs)	**Trial Exam Paper 3** **Calculator (Week 23)**
	24		**Unit 7** **Vectors &** **Exact Trig Values**
	25		
Summer 1	26	**UNIT 8** **Co-ordinate Geometry** (Parallel, Perpendicular Lines, Circles, Tangent)	**Revision**
	27		
	28	**Full Paper Calculator (Week 28)**	
	29	**UNIT 9** **Advanced Fractions** (Rationalise denominator, 4 ops with Algebraic Fracs)	
	30		
	31		
Summer 2	32	**Unit 10** **Ratio & Proportion** (Ratio Problems, Algebraic Direct & Inverse)	**GCSE** **Exams**
	33		
	34		
	35	**Full Paper 1 - Non Calculator and** **Paper 2 - Calculator (Week 35)**	
	36	**Unit 11** **Percentages** (Percentage Problems, Financial Maths, Reverse, Growth Decay and Iteration) **Transforamtion (R)**	
	37		
	38		
	39		