Subject: Maths. **Foundation / Higher**
Year: 10 **Overview**

ST. MARY MAGDALENE C OF E SCHOOL
PENINSULA CAMPUS
Excellence through innovation, founded in faith since 1840.

Key content – knowledge and skills	National Curriculum focus
Autumn 1: Number; Algebra; Number; Algebra **Autumn 2:** Fractions and percentages; Equations, inequalities, & sequences; Fractions, ratio and percentages; Interpreting and representing data **Spring 1:** Angles; Perimeter, area, and volume 1; Angles and trigonometry; Area and volume **Spring 2:** Graphs, tables, and charts; Averages and range; Graphs **Summer 1:** Graphs; Ratio and proportion; Equations and Inequalities; Multiplicative Reasoning **Summer 2:** Transformations; Probability; Transformations and constructions; Probability; Similarity and congruence **A/Learn Overview:** Foundation / Higher	**Subject content from the National Curriculum Programme of Study July 2014:** **N1 – N8** **A1 – A17** **R1 – R6** **G1 – G15** **P1 – P4** **S1 – S6**

Key assessment points

There will be one assessment each half-term
Autumn 1: Unit 1-2 assessment / Unit 1-2 assessment
Autumn 2: Unit 1, 2, 4, and 5 assessment / Unit 1-4 assessment
Spring 1: Unit 1, 2, 4, 5, 6, 8 assessment / Unit 1-5, 7, assessment
Spring 2: Unit 1-8 assessment / Unit 1-7 assessment
Summer 1: Unit 1-9, 11 assessment / Unit 1-7, 9, 11 assessment
Summer 2: Unit 1-11, 13 assessment / Unit 1-12 assessment

Christian ethos

With all mathematics studied we will be exploring how skills such as problem solving, numerical reasoning and real life applications, covered in each topic, will make our students confident and motivaited, fully equipped to make a positive contribution to society.

British values

An explicit opportunity in the Year 10 curriculum to explore British values falls within the discussion and debate created from exploring real life applications created from mathematics. Teachers will guide and advise students appropriately.

Subject: Year 10 Maths Foundation / Higher
Long-term plan

Week	Month	Learning Intentions and/or Key Questions
Aut1-1	September	Number Algebra Number Algebra **Half term assessment**
Aut1-2		
Aut1-3		
Aut1-4		
Aut1-5	October	
Aut1-6		
Aut1-7		
		Half term holiday
Aut2-1	November	Fractions and percentages Equations, inequalities, & sequences Fractions, ratio and percentages Interpreting and representing data **End of term assessment**
Aut2-2		
Aut2-3		
Aut2-4		
Aut2-5		
Aut2-6	December	
Aut2-7		
		Christmas holiday
Spr1-1	January	Angles Perimeter, area, and volume 1 Angles and trigonometry Area and volume **Half term assessment**
Spr1-2		
Spr1-3		
Spr1-4		
Spr1-5		
Spr1-6	February	
		Half term holiday
Spr2-1		Graphs, tables, and charts Averages and range Graphs **End of term assessment**
Spr2-2		
Spr2-3	March	
Spr2-4		
Spr2-5		
Spr2-6		
	April	**Easter holiday**
Sum1-1		Graphs Ratio and proportion; Equations and Inequalities Multiplicative Reasoning **Half term assessment**
Sum1-2		
Sum1-3	May	
Sum1-4		
Sum1-5		
Sum1-6		
	June	**Half term holiday**
Sum2-1		Transformations Probability Transformations and constructions Probability Similarity and congruence **End of year assessment**
Sum2-2		
Sum2-3		
Sum2-4		
Sum2-5	July	
Sum2-6		
Sum2-7		

Subject: Maths **Year:** 10
Medium-term plan **Foundation / Higher**
Autumn 1

Week	Module Overview	Cross-Curricular	Planning Links
1	**Integers and place value** **Calculations, checking & rounding**	Cross-Curricular Activity on a history of the number zero	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Decimals** **Indices, roots, reciprocals & hierarchy of operations**		
3	**Indices, powers and roots** **Factors, multiples and primes**		
4	**Factors, multiplies, and primes** **Standard form and surds**		
5	**Simplifying expressions** **Algebra – expanding & factorising**		
6	**Expanding and factorising brackets** **Algebra – Solving and rearranging**		
7	**Expressions and substitution into formulae** **Sequences**		

Subject: Maths **Year:** 10
Medium-term plan **Foundation / Higher**
Autumn 2

Week	Module Overview	Cross-Curricular	Planning Links
1	**Fractions** **Fractions**	Cross-Curricular Activity on a history of the number zero	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Fractions, decimals, and percentages** **Percentages**		
3	**Percentages** **Fractions, decimals & percentages**		
4	**Percentage increase & decreases** **Ratios**		
5	**Equations** **Ratio and proportion**		
6	**Inequalities** **Averages and range**		
7	**Sequences** **Representing and interpreting data and scatter graphs**		

Subject: Maths **Year:** 10
Medium-term plan **Foundation / Higher**
Spring 1

Week	Module Overview	Cross-Curricular	Planning Links
1	**Properties of shapes & angle facts** **Polygons, angles and parallel lines**	Cross-Curricular Activity on the mysterious mathematicans	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Angles in parallel lines** **Pythagoras' Theorem**		
3	**Interior and exterior angles of polygons** **Trigonometry**		
4	**Perimeter of 2D shapes** **Perimeter, area, and circles**		
5	**Area of 2D shapes** **3D forms and volume, cylinders, cones and spheres**		
6	**Volume of prisms** **Accuracy and bounds**		

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Spring 2

Week	Module Overview	Cross-Curricular	Planning Links
1	**Collecting and representing data** **Graphs – the basics**	Cross-Curricular Activity on the mysterious mathematicans	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Charts and graphs** **Graphs – real-life graphs**		
3	**Pie Charts** **Linear graphs**		
4	**Scatter graphs** **Coordinate geometry**		
5	**Averages** **Quadratic graphs**		
6	**Statistics and sampling** **Cubic and other graphs**		

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Summer 1

Week	Module Overview	Cross-Curricular	Planning Links
1	**Real-life graphs** **Solving quadratic equations**	Cross-Curricular Activity on music and probability	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Distance-time graphs** **Solving simultaneous equations**		
3	**Straight line graphs** **Solving linear inequalities**		
4	**Coordinate geometry** **Growth and decay – multipliers**		
5	**Ratio** **Direct and inverse proportion**		
6	**Proportion** **Compound measures**		

Subject: Maths **Year:** 10
Medium-term plan **Foundation / Higher**
Summer 2

Week	Module Overview	Cross-Curricular	Planning Links
1	**Translations and rotations** **Transformations**	Cross-Curricular Activity on music and probability	Active Learn Foundation Higher Complete Maths platform Planning Proforma Department padlet Resources folder
2	**Reflections and enlargements** **Bearings and scale drawings**		
3	**Mixed transformations** **Constructions and loci**		
4	**Calculating probabilities** **Probability - basics**		
5	**Experimental probability** **Probability – combined events**		
6	**Tree diagrams and Venn diagrams** **Similarity and congruence**		