

Maths Curriculum Map

Data, Primes, Factors and Multiples	Algebraic Manipulation, Accuracy and Rounding	Mensuration, Geometric Constructions and Calculations	Direct and Inverse Proportion and Percentage Change	Fractions & Decimals, Indices and Standard Form	Equations of graphs and Inequalities, Compound Units and 2D &3D Representations
<p style="text-align: center;">Data</p> <ul style="list-style-type: none"> ➤ Populations and samples ➤ Summary statistics ➤ Categorical and numerical data ➤ Summary Statistics ➤ Mis- representing data <p style="text-align: center;">Primes, Factors and Multiples</p> <ul style="list-style-type: none"> ➤ Prime numbers ➤ Prime numbers / Index Notation ➤ Highest Common Factor (HCF) and Lowest Common Multiple (LCM) 	<p style="text-align: center;">Algebraic Manipulation</p> <ul style="list-style-type: none"> ➤ Collecting like terms. ➤ Simplifying products and quotients. ➤ Multiplying out brackets ➤ Multiplying out brackets ➤ Factorising ➤ Substitution into formulae ➤ Change the subject of a formula. ➤ Formulate algebraic expressions ➤ Algebraic terminology and proofs <p style="text-align: center;">Accuracy and Rounding</p> <ul style="list-style-type: none"> ➤ Rounding ➤ Estimation ➤ Upper and lower bounds 	<p style="text-align: center;">Mensuration</p> <ul style="list-style-type: none"> ➤ Circle nomenclature / Circumference of a circle ➤ Area of a circle ➤ Polyhedra ➤ Pyramids, Cones and spheres ➤ Pythagoras' theorem ➤ Trigonometry in right-angled triangles ➤ Exact trig ratios <p style="text-align: center;">Geometric constructions and calculations</p> <ul style="list-style-type: none"> ➤ Perpendicular bisector. ➤ Angle Bisector ➤ Loci ➤ Angles at a point/on a line / between intersecting and parallel lines ➤ Angles in polygons ➤ Properties of a triangle ➤ Properties of quadrilaterals 	<p style="text-align: center;">Direct and Inverse Proportion</p> <ul style="list-style-type: none"> ➤ Equivalent ratios ➤ Ratios and fractions ➤ Division in a given ratio ➤ Solve ratio and proportion problems ➤ Direct proportion ➤ Inverse proportion <p style="text-align: center;">Percentage Change</p> <ul style="list-style-type: none"> ➤ Percentage conversions ➤ Percentage calculations ➤ Percentage change ➤ Growth and decay <p style="text-align: center;">Solving of Equations</p> <ul style="list-style-type: none"> ➤ Graphs of equations and functions ➤ Approximate solutions using a graph ➤ Simultaneous equations ➤ Linear equations in one unknown ➤ Quadratic equations 	<p style="text-align: center;">Fractions and Decimals</p> <ul style="list-style-type: none"> ➤ Calculations with fractions. ➤ Calculations with fractions. ➤ Fractions of a quantity ➤ Decimals and fractions ➤ Division of decimals ➤ Bivariate data and Outliers <p style="text-align: center;">Indices and Standard Form</p> <ul style="list-style-type: none"> ➤ Index notation ➤ powers and roots ➤ Laws of indices ➤ Calculations with numbers in standard form 	<p style="text-align: center;">Equations of graphs and Inequalities</p> <ul style="list-style-type: none"> ➤ Inequalities in one variable ➤ Graphs of equations and functions ➤ Straight line graphs <p style="text-align: center;">Compound Units</p> <ul style="list-style-type: none"> ➤ Units of measurement ➤ Compound units <p style="text-align: center;">2D &3D Representations</p> <ul style="list-style-type: none"> ➤ Maps and Scale drawings ➤ Plans and elevations ➤ Surface Area, Volume, Plans and elevations.

Assessments

Students are assessed at the end of Year 11 with three 1 hour 30-minute terminal examinations. There will be one non-calculator paper and two calculator papers

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Geometric Review and Probability	Probability, Sequences and Graphs	Transformations and Similar Figures,	Functions, Graphs and Vectors	Revision
<p>Geometric Review</p> <ul style="list-style-type: none"> ➤ Angles ➤ Circle nomenclature ➤ Measurement in circles ➤ Properties of quadrilaterals ➤ Properties of a triangle ➤ Pythagoras and trigonometry ➤ Straight line graphs ➤ Parallel and perpendicular lines ➤ Straight line graphs. <p style="text-align: center;">Probability</p> <ul style="list-style-type: none"> ➤ The probability scale ➤ Equally likely outcomes and probability ➤ Relative frequency and probability 	<p style="text-align: center;">Probability</p> <ul style="list-style-type: none"> ➤ Sample spaces ➤ Enumeration ➤ Venn diagrams and sets ➤ The addition law of probability ➤ Tree diagrams ➤ The multiplication law of probability and conditional probability <p style="text-align: center;">Sequences</p> <ul style="list-style-type: none"> ➤ Generate terms of a sequence ➤ Special sequences <p style="text-align: center;">Graphs</p> <ul style="list-style-type: none"> ➤ Straight line Graphs ➤ Pythagoras ➤ Perimeter ➤ Areas ➤ Graphs of real-world contexts ➤ Gradients 	<p style="text-align: center;">Transformations</p> <ul style="list-style-type: none"> ➤ Reflection ➤ Rotation ➤ Column Vectors, Translation <p style="text-align: center;">Similar Figures</p> <ul style="list-style-type: none"> ➤ Congruent triangles ➤ Applying congruent triangles ➤ Similar triangles ➤ Enlargement ➤ Similar shapes ➤ Exact calculations ➤ Volumes and surface area calculations 	<p style="text-align: center;">Functions and Graphs</p> <ul style="list-style-type: none"> ➤ Polynomial functions ➤ Functions ➤ Graphs of equations and functions <p style="text-align: center;">Vectors</p> <ul style="list-style-type: none"> ➤ Calculations with fractions. ➤ Calculations with fractions. ➤ Fractions of a quantity ➤ Decimals and fractions ➤ Division of decimals ➤ Bivariate data and Outliers 	

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