



Holy Trinity

Maths Long Term Plan – Secondary

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Y7	<u>Making generalisations about the number system 1</u> - Place Value - Four rules - Order of operations - Factors and multiples	<u>Making generalisations about the number system 2</u> - Positive and negative numbers - Expressions, equations, and inequalities	<u>2-D Geometry</u> - Angles - Classifying 2-D shapes - Constructions	<u>The Cartesian plane</u> - Area of 2-D shapes - Coordinates - Transformations	<u>Fractions</u> - Prime factor decomposition - Conceptualising and comparing fractions - Manipulating and calculating with fractions	<u>Ratio and Proportion</u> - Ratio - Percentages
Y8	<u>Equations and inequalities</u> - Approximations and estimations - Solving equations - Solving inequalities	<u>Graphical representations</u> - Sequences - Linear graphs	<u>Proportional reasoning</u> - Ratio review Real life and conversion graphs - Proportion	<u>Representations and reasoning with data</u> - Measure - Univariate data - Bivariate data	<u>Angles</u> - Angles in polygons - Bearings	<u>Area, volume and surface area</u> - Circles - 3D shapes - Volume and surface area of Prisms
Y9	<u>Probability</u> - FDP Review - Venn diagrams - Probability	<u>Geometry of triangles</u> - Angle review - Constructions, congruence, and loci - Pythagoras' Theorem	<u>Ratio and proportion</u> - Ratio review - Similarity and enlargement - Pie charts	<u>Linear equations</u> - Formula - Form and solve equations - Simultaneous equations	<u>Reasoning with number</u> - Indices and standard form - Growth and decay	<u>Statistics</u> - Averages from tables - Stem and leaf diagrams
Y10 Foundation	UNIT 1: Number, powers, decimals, HCF and LCM, roots and rounding.	UNIT 3: Drawing and interpreting graphs, tables and charts	UNIT 4: Fractions and percentages	UNIT 5: sequences UNIT 6: Angles, polygons and parallel lines	UNIT 7: Statistics, sampling and the averages	UNIT 9: Real-life and algebraic linear graphs

	UNIT 2: Expressions, substituting into simple formulae, expanding and factorising		UNIT 5: Equations, inequalities		UNIT 8: Perimeter, area and volume	UNIT 10: Transformations
Y10 Higher	<p>UNIT 1: Powers, decimals, HCF and LCM, positive and negative, roots, rounding, reciprocals, standard form, indices and surds</p> <p>UNIT 2: Expressions, substituting into simple formulae, expanding and factorising, equations, inequalities, and simple proof</p>	<p>UNIT 2: sequences</p> <p>UNIT 3: Averages and range, collecting data, representing data</p>	<p>UNIT 4: Fractions, percentages, ratio and proportion</p> <p>UNIT 5: Angles, polygons, parallel lines; Right-angled triangles: Pythagoras and trigonometry</p>	<p>UNIT 6: Real-life and algebraic linear graphs, quadratic and cubic graphs, the equation of a circle, plus rates of change and area under graphs made from straight lines</p>	<p>UNIT 7: Perimeter, area and volume, plane shapes and prisms, circles, cylinders, spheres, cones; Accuracy and bounds</p> <p>UNIT 8: Transformations;</p>	<p>UNIT 8: Constructions: triangles, nets, plan and elevation, loci, scale drawings and bearings</p> <p>UNIT 9: Algebra: Solving quadratic equations and inequalities, solving simultaneous equations algebraically</p>

	Autumn 1	Autumn 2	Spring 1	Spring 2
Y11 Foundation	UNIT 11: Ratio and Proportion UNIT 12: Right-angled triangles: Pythagoras and trigonometry UNIT 13: Probability	UNIT 14: Multiplicative reasoning: more percentages, rates of change, compound measures UNIT 15: Constructions: triangles, nets, plan and elevation, loci, scale drawings and bearings	UNIT 16: Algebra: quadratic equations and graphs UNIT 17: Perimeter, area, and volume 2: circles, cylinders, cones and spheres UNIT 18: More fractions, reciprocals, standard form, zero and negative indices	UNIT 19: Congruence, similarity and vectors UNIT 20: Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations
Y11 Higher	UNIT 10: Probability UNIT 11: Multiplicative reasoning: direct and inverse proportion, relating to graph form for direct, compound measures, repeated proportional change UNIT 12: Similarity and congruence in 2D and 3D	UNIT 13: Sine and cosine rules, $ab \sin C$, trigonometry and Pythagoras' Theorem in 3D, trigonometric graphs, and accuracy and bounds UNIT 14: Statistics and sampling, cumulative frequency and histograms	UNIT 15: Quadratics, expanding more than two brackets, sketching graphs, graphs of circles, cubes and quadratics UNIT 16: Circle theorems and circle geometry UNIT 17: Changing the subject of formulae (more complex), algebraic fractions, solving equations arising from algebraic fractions, rationalising surds, proof	UNIT 18: Vectors and geometric proof UNIT 19: Direct and indirect proportion: using statements of proportionality, reciprocal and exponential graphs, rates of change in graphs, functions, transformations of graphs