

KS4 TOPIC PLANNER

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
YEAR 10 set 1 and 2	Angles in Polygons straight line graphs Algebra - simplifying, expanding, factorising, solving (including Quadratics) Quadratic and Geometric sequences Index rules including fraction and negative	Solve Quadratics by factorising, Quadratic formula and Completing the Square. Recap percentages and complete reverse percentages. Inequalities Ratio - including currency conversion and amending recipe. Histograms	Simultaneous Equations Linear, Quadratic, cubic graphs. Probability - venn diagrams, Sets, tree diagrams Converting recurring decimals to fractions Accuracy and Bounds	Graphs - reciprocal and circular graphs. Area and circumference of circles recap Arc lengths and areas of sectors. Standard form Surds	Volumes and surface area of 3D shapes - including Prisms, Cylinders, Cone, Spheres, pyramids and complex problems involving these. Simultaneous Quadratic equations. Similarity and Congruence of 2D and 3D shapes.	Direct and inverse Proportion. Circle theorems. Functional maths.
YEAR 10 Set 3	Angles in Polygons straight line graphs Algebra - simplifying, expanding, factorising, solving (including basic Quadratics) Quadratic and Geometric sequences Index rules including fraction and negative	Fractions - four operations Recap percentages and complete reverse percentages. Inequalities Ratio - including currency conversion and amending recipe. Cumulative frequency	Simultaneous Equations Linear, Quadratic, cubic graphs. Probability - venn diagrams, Sets, tree diagrams Converting recurring decimals to fractions Pythagoras theorem	Area and Circumference of a Circle. Quadratic Equations - Factorising, Quadratic Formula, Completing the Square.	Histograms Probability recap - venn diagrams, Sets, Tree Diagrams	Accuracy and Bounds Trigonometry Functional Maths
YEAR 10 set 4 and 5	Properties of shapes - including triangles, Quadrilaterals. Angle facts - including angles on a straight line, around a point, angles in a triangle, vertically opposite. Real life graphs Substitution Linear Sequences Scatter Graphs	Percentages - percentage of an amount, Percentage increase and Decrease. Solving Equations	Linear graphs and coordinate geometry Percentages Substitution Rearranging Formulae Iteration	Averages and range Pythagoras theorem Trigonometry	Perimeter and area Circle Transformations Probability 3D shapes Volume and surface area Standard Form	Ratio & Proportion Cumulative frequency Box plots Scatter graphs Bearing Loci
YEAR 11 set 1 and 2	Circle theorems probability Graphs of Trigonometric functions Changing the subject of the formula Algebraic fractions Surds Proof	Reciprocal and exponential graphs Gradient and area under graphs Vectors and Geometric proof Multiplicative reasoning Direct and Inverse proportion Further Trigonometry-Sine and Cosine rule.	Simultaneous equations with Quadratics. Reciprocal and exponential graphs. Gradients of curves using tangents. Area under graphs. Circle Geometry- Equations of circles and tangents to circles.	Accuracy and bounds. Sequences - Linear, Quadratic, Geometric and Fibonacci. Indices - fractional and negative, roots and order of operations. Volumes and surface area of 3D shapes- prisms, spheres and cones.	Direct and inverse proportion, Standard Form and Surds.	Exam preparation.
YEAR 11 set 3	Calculation & rounding Real life graphs Polygons, angles and parallel lines Algebra Elevation, construction	Fractions Collecting, representing and interpreting data Factors, multiples and primes Sequences Equations	Linear graphs and coordinate geometry Percentages Substitution Rearranging Formulae Iteration	Averages and range Pythagoras theorem Trigonometry	Perimeter and area Circle Transformations Probability 3D shapes Volume and surface area Standard Form	Ratio & Proportion Cumulative frequency Box plots Scatter graphs Bearing Loci
YEAR 11 set 4 and 5	Integers, place value interpreting tables Properties of shapes Angles Statistics and sampling Congruent shapes Constructions Algebra	Fractions Charts and graphs Factors, multiples, primes Sequences Decimals	Straight line graphs Converting decimals- fractions-percentages Percentages Averages and range	Indices, powers and roots Properties of right-angled triangles Pythagoras theorem	Perimeter and area Ratio and proportion Transformations Probability Algebra	Index laws Pie charts HCF, LCM Expansion and factorisation Problem solving