

YEAR 11 CURRICULUM MEDIUM TERM PLAN - MATHS (F) 3Yr Yr 11 Sept 22



TOPIC	KEY LEARNING	ASSESSMENT
HT1: Probability HT1: Multiplicative Reasoning	Calculating probability of events. Probability of two events. Experimental probability. Venn diagrams. Tree diagrams. Dependent and independent events and tree diagrams Percentage change. Repeated percentage change. Growth and decay. Compound interest. Compound measures. Distance, speed and time. Kinematics formulae for moving objects. Direct proportion and Inverse proportion	<u>Assessment on Probability</u> Multiplicative Reasoning
HT2: Constructions Loci & Bearings HT2: Quadratic Equations & Graphs	3d solids. Plans and elevations. Planes of symmetry. Constructing and identifying triangles from unique descriptions. Scale drawings and maps. Using scales. Draw angles and 2d shapes with ruler protractor and compasses. Draw nets accurately. Constructions and bisections. Loci. Regions bounded by Loci. Bearings Expanding double brackets. Plotting quadratic graphs. Using quadratic graphs. Factorising quadratic expressions. Solving quadratic equations algebraically.	<u>Assessment on Constructions Loci & Bearings</u> Quadratic Equations & Graphs
HT3: Perimeter, Area and Volume 2 HT3: Fractions, Indices & Standard form	Finding circumferences. Calculating circumference and radius'. Error Intervals. Areas of circles. Use terms of Pi. Identifying parts of a circle. Area and perimeter of sectors of circles. Volume and surface areas of 2d shapes, cylinders, pyramids, cones, spheres. Volume and surface area of composite solids Multiplying and dividing mixed numbers and fractions. Know and use the laws of indices (including negative indices). Standard form (large numbers). Standard form (small numbers). Convert from standard form to ordinary numbers (including negative indices) Calculating using all 4 functions with standard form..	<u>Assessment on Perimeter Area and Volume 2</u> Fractions, Indices & Standard form
HT4: Congruence Similarity & Vectors	Understand and use similarity and enlargement. Finding scale factors. Determining when shapes are/ are not similar. Similarity in regular polygons. Perimeters of similar shapes. Understand and use conditions of congruency to work out unknown sides and angles. Add and subtract vectors. Find resultant vectors. Find vector multiples. Parallel vectors. Interpret and draw cubic and reciprocal graphs. Solving problems with non-linear graphs. Solving simultaneous equations graphically. Solving simultaneous equations algebraically. Rearranging formulae. Knowing and understanding the differences between expressions, equations, formulae and identities. Algebraic proof.	<u>Assessment on:</u> Congruence, Similarity & Vectors.
HT5: More Algebra	Interpret and draw cubic and reciprocal graphs. Solving problems with non-linear graphs. Solving simultaneous equations graphically. Solving simultaneous equations algebraically. Rearranging formulae. Knowing and understanding the differences between expressions, equations, formulae and identities. Algebraic proof.	<u>Assessment on:</u> More Algebra