Maths

KS4 Curriculum Plan

		LP1	LP2	LP3	LP4	LP5
Year 10	TOPIC	***Similarity***	***Developing Algebra and geometry***	***Geometry, proportions and proportional change***	***Proportions, proportional change and delving into data***	***Using number***
	Knowledge	Congruence, similarity and enlargement and trigonometry	Representing solutions of equations and inequalities, Simultaneous equations and angles and bearings	Working with circles, vectors, ratios & fractions	Percentages and interest, probability, collecting, represent and interpreting data	Non-calculator methods, types of number and sequences, indices and roots
	Skills	Apply and demonstrate knowledge and understanding of mathematical skills to problem solve, using a range of modelling & mathematical representations. Use reasoning strategies to investigate mathematical concepts. Prove conjectures within the maths content taught.				
	Key Vocab	**Congruence, similarity and enlargement:** Enlarge, scale factor, centre of enlargement, similar, congruent, corresponding, parallel **Trigonometry:** Constant, cosine ratio, sine ratio, tangent ratio, inverse, hypothenuse	**Representing solutions of equations and inequalities:** Solution, variable, equation, expression, identity, linear, intersection, inequality **Simultaneous equations:** Solution, variable, equation, substitute, LCM, eliminate, expression, coordinate, intersection **Angles and bearings:** Cardinal directions, angle, bearing, perpendicular, parallel, clockwise, construct, scale, protractor	**Working with circles:** Circumference, area, diameter, radius, tangent, chord, frustrum, hemisphere, surface area **Vectors:** Direction, magnitude, scalar, column vector, resultant, parallel **Ratios & fractions:** Ratio, equivalent, proportion, integer, fraction, denominator, numerator, origin, gradient	**Percentages and interest:** Exponent, compound interest, depreciation, growth, decay, multiplier, equivalent **Probability:**Event, outcome, intersection, union, expected value, universal set, systematic, product **Collecting, represent and interpreting data:** Population, sample, representative, random sample, bias, primary data, secondary data, outlier	**Non-calculator methods:** Truncate, round, credit, debit, profit, tax, balance, overestimate, underestimate **Types of number and sequences:** Factor, multiple, HCF, LCM, arithmetic, geometric, sequence **Indices and roots:** Standard form, commutative, base, power, exponent, indices, negative, coefficient

		LP1	LP2	LP3	LP4	LP5
Year 11	TOPIC	***Algebra***	***Number***	***Ratio, Proportion & Data***	***Geometry & Preparation for exams***	
	Knowledge	Manipulating expressions, solving equations & inequalities, sequences and graphs	Percentages, types of number, standard form, exact calculations and limits of accuracy	Ratio, proportion, compound measures, probability and data	Area & perimeter, transformations & similarity , angles and Pythagoras' Theorem	
	Skills	Apply and demonstrate knowledge and understanding of mathematical skills to problem solve, using a range of modelling & mathematical representations. Use reasoning strategies to investigate mathematical concepts. Prove conjectures within the maths content taught.				
	Key Vocab	**Manipulating expressions:** Expand, highest common factor (HCF), factorise	**Percentages:** Exponent, compound interest, depreciation, growth, decay, multiplier, equivalent	**Ratio & Proportion:** Proportion, ratio, direct proportion, inverse proportion	**Area & perimeter:** Parallelogram, trapezium, pyramid, sphere,	