

PCS Maths curriculum Map

	Year 9	Yr 9 Higher Top set Higher + Statistics GCSE	Year 10	Year 10 Top set Higher + statistics GCSE	Year 11	Year 11 Top set Higher + GCSE Statistics
Intention: 1. GCSE success. 2. logical reasoning and problem solving 3. fluency 4. functionality in real-life [cross curricular] contexts Starters = quick quizzes based on QLA HW = MyMaths + GCSE Pod revision						
Impact Formative = Weekly Exit ticket + Fortnightly Mini-rolls [cumulative 1 st 40 marks] Impact summative = Mock 1 Oct [yr 10 tiering papers, yr 11 2 papers] Mock 2 Jan 2 papers, Mock 3 Mar [yr 11 3 papers] Mock 3 June [yr 10] 2 papers. Pin-point personalised learning booklets post every mock. Yr 9 end of year AQA exam						
Autumn 1	Number [non-calculator arithmetic, negative numbers, BIDMAS, rounding and estimation, using a calculator, percentages, standard form (conversion)]	Number problems and reasoning - Calculating with powers (indices) - Zero, negative and fractional indices - Powers of 10 and standard form (4 operations) - Surds	Graphs Transformations	Equations and inequalities Probability Statistics 6	Indices Standard form Congruence and similarity Vectors	Vectors and geometric proof Proportion and graphs
Autumn 2	Algebra substitution, simplifying expressions, expand single and double brackets, factorise single brackets, sequences: linear and quadratic sequences (generating only, not nth term for quadratic sequences), linear graphs	Algebra - Algebraic indices - Expanding and factorising - Equations - Formulae (Inc. formula's from Science and Statistics) - Linear sequences - Quadratic sequences	Ratio and proportion Right-angled triangles	Multiplicative reasoning Statistics 7		
Spring 1 & 2	Graphs, tables and charts Fractions and percentages Equations, inequalities and sequences 	Interpreting and representing data Fractions, ratio and percentages Angles and trigonometry Statistics 1 and 2 	Probability Multiplicative Reasoning Constructions, loci and bearings	Similarity and congruence More trigonometry Further Statistics Statistics 8	Revision – Last 60	
Summer 1&2	Financial planning 	Financial planning Statistics 3, 4, 5 	Quadratic equations and graphs Perimeter, area and volume	Quadratic equations and graphs Circle theorems More Algebra		

	Year 7	Year 7 Higher Top 3 sets Higher	Year 8	Year 8 Higher Top 3 sets Higher
Intention: 1. GCSE success. 2. logical reasoning and problem solving 3. fluency 4. functionality. Starters = TimesTable Rockstars + Numeracy Ninjas + quick quizzes based on QLA HW = MyMaths + revision				
Impact Baseline = SAT arithmetic scores + GL baseline + SEN numeracy tests + CATs Impact Formative = Weekly Exit ticket + Low stakes progress quiz Impact summative = Termly MCQ + GL end of year test				
Autumn 1	Taking Flight - Speed, distance, time - Angles of elevation - Plans and elevations - Collect, record and present data - Introduction to proportionality GL assessment follow up, emphasis on number Inc. fractions 	Taking Flight - Speed, distance, time - Angles of elevation - Plans and elevations - Collect, record and present data - Introduction to proportionality GL assessment follow up, emphasis on number Inc. fractions 	Number - Order fractions, decimals and percentage - Indices - Prime factorization - HCF, LCM, - Rounding, sig figs and estimation - Calculate with positive rational and decimal numbers - Using a calculator	Number - Order fractions, decimals and percentages - Indices - Prime factorization - HCF, LCM, Rounding, sig figs and estimation - Using a calculator - Inc. Standard form (conversion)
Autumn 2	Algebra [Inc. Order of operations] - Substitution - Simplifying algebraic expressions - Solve equations 1 and 2 step - Forming expressions and equations - Sequences (continuing)	Algebra [Inc. Order of operations] - Substitution - Simplifying algebraic expressions - Solve equations 1 and 2 step - Forming expressions and equations - Sequences (continuing and nth term)	Algebraic Expressions - Calculate and evaluate expressions with rational numbers - Algebraic manipulation - Linear equations - Expressions and equations from real-world situations	Algebraic expressions - Inc. Compound inequalities - Calculate gradient from a line Inc. Tangent to a curve and velocity time graphs - Plot linear graph using $y=mx+c$
Spring 1	Geometry - Draw, measure and name acute and obtuse angles and shapes - Find unknown angles (straight lines, at a point, vertically opposite) - Properties of triangles and quadrilaterals - Area of parallelograms	Geometry - Draw, measure and name acute and obtuse angles and shapes - Find unknown angles (straight lines, at a point, vertically opposite) - Properties of triangles and quadrilaterals - Area of parallelograms and trapeziums	2D and 3D Geometry - Finding unknown angles (including parallel lines) - Conversion between length units (and area and volume units) - Area and perimeter of composite figures - Area of trapeziums and circles - Visualise and identify 3D shapes and their nets - Surface area of cuboids - Circumference of a circle - Volume of cuboid, prism, cylinder, composite solids	2D and 3D Geometry (Inc. solving/rearranging equations) - Finding unknown angles (including parallel lines) - Conversion between length units (and area and volume units) - Area and perimeter of composite figures - Area of trapeziums and circles - Visualise and identify 3D shapes and their nets - Surface area of cuboids - Circumference of a circle - Volume of cuboid, prism, cylinder, composite solids
Spring 2	Fractions and Percentages - Add and subtract improper fractions - Change mixed numbers to improper fractions and vice versa - Fraction of a quantity - Convert between fractions, decimals and percentages - Percentage of a quantity	Fractions and percentages - Add and subtract improper fractions - Change mixed numbers to improper fractions and vice versa - Fraction of a quantity - Convert between fractions, decimals and percentages - Percentage of a quantity - Reverse percentage finding original	Proportional Reasoning - Expressing a quantity as a percentage of another - Percentage increase and decrease, finding the whole given the part and the percentage - Ratio (equivalent, of a quantity) - Compound measures Speed, distance, time, DMV, PMF 	Proportional reasoning - Expressing a quantity as a percentage of another - Repeated percentage change (compound interest and depreciation) - Ratio (equivalent, of a quantity) and reverse ratio - Compound measures Speed, distance, time, DMV, PMF 
Summer 1	Pie Charts and real life graphs - Read, draw and interpret pie charts. - Proportionality and pie charts - Simplifying ratios - Distance time graph 	Pie Charts and real life graphs - Read, draw interpret pie charts. - Proportionality and pie charts - Simplifying ratios - Distance time graph - Velocity time graph Inc. area under a graph 	Statistics Collect and organise data - Construct and interpret graphs – pictograms, bar, pie charts, line graphs - Identify and compare statistical representations using averages and range - Comparing two data sets - Stem and leaf, mean, scatter diagrams, probability	Statistics Collect and organise data - Construct and interpret graphs – pictograms, pie charts, line graphs - Identify and compare statistical representations using averages and range - Comparing two data sets - Stem and leaf, mean, scatter diagrams, probability
Summer	Planning a holiday (Inc. currency conversion) and online safety How to revise GL assessment follow up 	Planning a holiday (Inc. currency conversion) and online safety How to revise GL assessment follow-up 	Binary and hexadecimal How to revise GL assessment follow up 	Binary and hexadecimal How to revise GL assessment follow up 