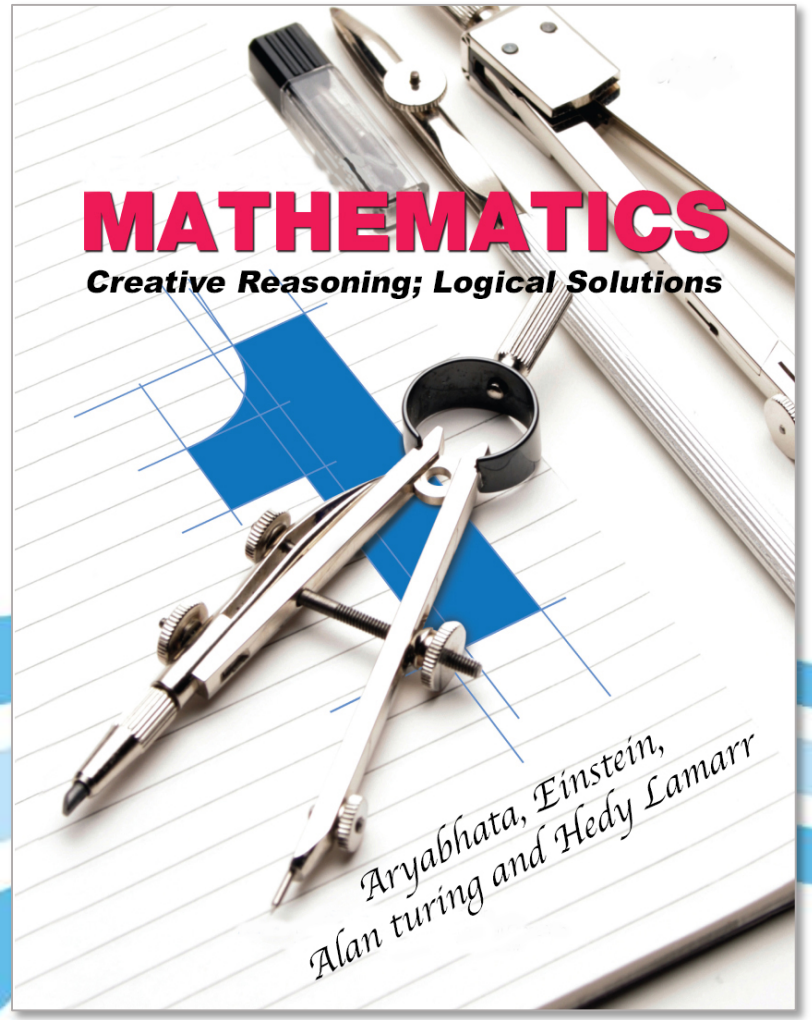
Park Community School

Maths Curriculum Map

Competencies apply to all sows



AO1 Use and apply standard techniques

Students should be able to:

- accurately recall facts, terminology and definitions
- use and interpret notation correctly
- accurately carry out routine procedures or set tasks requiring multi-step solutions.

AO2 Reason, interpret and communicate mathematically

Students should be able to:

- make deductions, inferences and draw conclusions from mathematical information
- construct chains of reasoning to achieve a given result
- interpret and communicate information accurately
- present arguments and proofs
- assess the validity of an argument and critically evaluate a given way of presenting information.

AO3 Solve problems within mathematics and in other contexts

Students should be able to:

- translate problems in mathematical or nonmathematical contexts into a process or a series of mathematical processes
- make and use connections between different parts of mathematics
- interpret results in the context of the given problem
- evaluate methods used and results obtained
- evaluate solutions to identify how they may have been affected by assumptions made

	Year 7 Times Table Rock Stars each lesson HW is from MyMaths	Year 7 higher Top 4 sets Higher Times Table Rock Stars each lesson HW is from MyMaths	Year 8 Times Table Rock Stars each lesson HW is from MyMaths	Year 8 higher Top 4 sets Higher Times Table Rock Stars each lesson HW is from MyMaths
	First 40 quiz + SEN numeracy tests		SEN numeracy tests	
Autumn 1	First 40 [?Place value (inc. decimals) Multiply and divide by 10, 100, 1000 Add and subtract (inc. decimals) Checking solutions Perimeter Word Problems Multiply and divide (inc. decimals) Area of rectangle and triangle Calculate the mean Factors, HCF, Primes]	First 20 Geometry	Number [Indices Prime factorization HCF, LCM, squares, cubes Order of operations Rounding, sig figs and estimation Multiply and divide fractions and mixed numbers Calculate with positive rational and decimal numbers Using a calculator]	Number
Autumn 2			Algebraic Expressions [Negative numbers and inequality statements Calculate and evaluate expressions with rational numbers Algebraic manipulation Linear equations Expressions and equations from real-world situations]	Algebraic expressions
Spring 1	Geometry [Draw, measure and name acute and obtuse angles Find unknown angles (straight lines, at a point, vertically opposite) Properties of triangles and quadrilaterals Area of parallelograms] Race at our place – sports	Fractions 1 Race at our place	2D and 3D Geometry [Drawing accurate triangles and quadrilaterals 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 Surface area of cuboids Visualise and identify 3D shapes and their nets Circumference of a circle Volume of cuboid, prism, cylinder, composite solids]	2D and 3D geometry
Spring 2	Fractions [Equivalent fractions Compare and order fractions and decimals Multiples and LCM Add and subtract fractions Change mixed numbers to improper fractions and vice versa Fraction of a quantity] Bloodhound SDT	Fractions 2 Bloodhound SDT	Proportional Reasoning [Convert between fractions, decimals and percentages Percentage increase and decrease, finding the whole given the part and the percentage Ratio (equivalent, of a quantity) and rate Speed, distance, time, multiply and divide fractions] Bloodhound SDT	Proportional reasoning Bloodhound SDT
Summer 1	Algebra [Order of operations Substitution Simplifying algebraic expressions Solve word problems with expressions, sequences]	Algebra	Statistics [Collect and organise data Construct and interpret graphs – pictograms, bar charts, pie charts, line graphs. Identify and compare statistical representations using averages and range. Comparing two data sets stem and leaf, mean from grouped data, scatter diagrams, probability]	Statistics
Summer 2	Percentages and Pie Charts [Read and interpret pie charts. Convert between fractions, decimals and percentages Percentage of a quantity Find the whole, given the part and the percentage] ECDL Project	Percent and pie charts ECDL project	Binary etc project	Binary etc project
	National Baseline test [meeting national expectations]		National Baseline test [meeting national expectations]	

	Year 9 Times Table Rock Stars each lesson HW is from MyMaths	Yr 9 higher Top 4 sets Higher Times Table Rock Stars each lesson HW is from MyMaths	Year 9 Top set **Maths gcse + Statistics gcse courses**	Year 10 HW is from MyMaths	Year 10 Top 4 sets Higher HW is from MyMaths All work up to grade 7 completed	Year 10 Top set **Maths gcse + Statistics gcse courses** All work up to grade 7 completed	Year 11 HW CGP Revision Guide + Exam practise workbook	Year 11 Top 3 sets Higher	Year 11 Top set **Maths gcse + Statistics gcse courses** **Grade 8/9 work**
Autumn 1	SEN numeracy tests			SEN numeracy tests			SEN numeracy tests		
	Number [non-calculator arithmetic, negative numbers, BIDMAS, rounding and estimation, using a calculator, percentages, standard form]	Number problems and reasoning Place value and estimating HCF and LCM Calculating with powers (indices) Zero, negative and fractional indices Powers of 10 and standard form Surds	Number 1 Number problems and reasoning Place value and estimating HCF and LCM Calculating with powers (indices) Zero, negative and fractional indices Powers of 10 and standard form Surds	Number Algebra	Graphs [F] Transformations Equations and inequalities [H] Probability (H)	Equations and inequalities [H] Statistics 6	Fractions, indices and standard form (F) Congruence similarities and vectors. [F]	Vectors and geometric proof (H) Proportion and graphs (H)	
							Mock 1: paper 1 and 2 Edexcel Summer paper full		
Autumn 2	Algebra [substitution, simplifying expressions, expand single and double brackets, factorise single brackets, sequences: linear and quadratic (generating only, not nth term for quadratic sequences), linear graphs, Quadratic/cubic/reciprocal graphs Disney project	Algebra Algebraic indices Expanding and factorising Equations Formulae Linear sequences Non-linear sequences More expanding and factorizing Disney project	Algebra Algebraic indices Expanding and factorising Equations Formulae (inc. formula's from Science and Statistics) Linear sequences Non-linear sequences More expanding and factorizing Disney project	Interpreting data, graphs, tables and charts	Probability [F/H] Multiplicative reasoning (H) Ratio and proportion (F)	Statistics 7 Multiplicative reasoning (H)			
				Mock 1 paper 1 and 2/3 – sections already taught + 'challenge' section [building confidence]					
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	Fractions, ratio and percentages Angles and trigonometry	Fractions, ratio and percentages Equations, inequalities and sequences	Right-angled triangles (F) Probability (F) Multiplicative Reasoning (F) Similarity and congruence (H) More trigonometry (H) Further Statistics (H)	Similarity and congruence (H) More trigonometry (H) Statistics 8	Mock 2 Jan PiXL PPE all papers		
				Mock 2 March paper 1 and 2/3 – sections already taught + 'challenge' section [building confidence]			Mock 3 March PiXL curve all papers		
							Easter holiday WTM		
Summer 1&2	Financial planning	Financial planning	Statistics 3, 4, 5 Financial planning (condensed inc. reference to statistics e.g.. CPI, RPI etc.)	Angles and trigonometry Averages and range	Quadratic equations and graphs (H) Constructions ,loci and bearings (F) Perimeter, area and volume (F) Circle theorems (H) More Algebra (H)	Quadratic equations and graphs (H) Circle theorems (H) More Algebra (H)	Whitsun holiday WTM PiXL predictive paper 2		
	Test……			Perimeter, area and volume Transformations and construction					