

















## **Overall Curriculum Map 2019-2020**

**Subject: Maths** 

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
	Curriculum Topics	Curriculum Topics	Curriculum Topics	Curriculum Topics	Curriculum Topics	Curriculum Topics
7	Algebra – sequences	Number – Place Value	Number – Addition &	Number – Directed number	Shape – Construction &	Number – Reasoning & Number
	Algebra – Notation	Number – FDP	Subtraction	Number – Fractions	Notation	sense
	Algebra – Equality & Equivalence	Life Skills (Money Management)	Number – Multiplication &		Shape – Geometric reasoning	Probability
	, , ,		Division	Commonsings		Number – Prime numbers &
	Coguencing	Commonsings		Sequencing: Order directed numbers	Soguensings	Proof
	Sequencing:	Sequencing: Describe & continue a sequence	Sequencing:		Sequencing:  Draw and measure lines using a	
	Describe & continue sequences	Compare and order whole,	Review methods of addition &	Four rules of calculations with directed numbers	ruler	Sequencing:
	Find missing terms in a		subtraction		Draw and measure angles using	Mental arithmetic strategies
	sequence Find the nth term of sequences	decimal, negative & fractional numbers	Solve problems including money	Substitution, sequences and BIDMAS with negative numbers	a ruler & protractor	Tests of divisibility
	Recognise the difference	Use inequality symbols to	and shape.	Use inequality symbols	Understand & use angle & line	Revisit FDP conversions
	between linear and non linear		Read information from tables	Solve inequalities and display on	notation	Use known facts to derive other
	sequences	compare Round to the nearest 10, 100 etc	and charts	a number line	Recognise parallel &	facts
	Recognise different types of	Round to decimal places and	Using Frequency trees	a number me	perpendicular lines	Investigate odd and even
	sequences such as	significant figures	Addition & subtraction with	Addition & subtraction of	Recognise common triangles,	numbers using algebra
	geometric/Fibonacci	Find the range, median and	standard form	fractions with and without	quadrilaterals & polygons	numbers using algebra
	geometric/Tibonacci	mode of a list of numbers and	Solve problems and reverse	common denominators	Draw triangles using	Understand and use Venn
	Use inverse operations	from a table	problems in context with	Revisit equivalent fractions	constructions	diagrams
	Simplify algebraic expressions	Estimate calculations	algebra	Mixed decimal & fraction	Bisect angles & lines	Place events in the order of
	Use function machines	Use upper and lower bounds	algebra	questions	Draw & interpret pie charts	likelihood
	Substitute numbers into	Use standard index form	Multiply & divide by powers of	Improper and mixed fractions	Revisit standard form	Basic probability of a single
	expressions	ose standard mack form	10	Use of a calculator	Understand congruency	event using the scale 0 to 1 and
	Represent functions graphically	Represent FDP on a number line	Convert between metric units	Algebraic fractions	Pythagoras' theorem	list outcomes
	Generate sequences from an	Find and compare fractions in	Find percentages and fractions	Recognise & use reciprocals	,,	Collect and record data from a
	algebraic rule	shapes	of an amount		Calculate angles on a line, at a	simple experiment
	ŭ	Interchange between FDP	Area of rectangles, triangles,		point & vertically opposite	Understand & use set notation
	Use number bonds and the bar	Equivalent fractions including	parallelograms, trapeziums &		angles	Find the probability of events
	model	algebraic fractions	BIDMAS		Calculate missing angles in	not happening
	Solve one step linear equations	Solve equations with fractions	Find Highest Common Factors		triangles & quadrilaterals.	Use two way tables
	Simplify like terms	Interpret Pie charts	&Lowest Common Multiples		Find angles in parallel lines	Know that increasing the times
	Write an equation and solve it	Introduction of rational and	Find the mean from frequency		Find angles in polygons	of an experiment leads to better
	Multiply a term over a bracket	irrational numbers	tables		Understand the proof of angles	estimates of probability
	Understand the meaning of	Convert recurring decimals to	Algebraic area		on a straight line	Venn diagrams for HCF & LCM
	equivalence and identity	fractions	Increase percentages using a		Involve algebra into shape	And / Or rules for probability
	Solve simultaneous equations		multiplier		questions	Exclusive & exhaustive events
		Recognising your money	Repeated percentage change			
		personality	Solve equations			

















		Value for money Understanding bank accounts, read statements and track transactions Attitude to money and safeguarding financial information				Types of number including factors & multiples Find the product of prime factors Index notation & laws of indices Multiplication & division with standard form Algebraic proof
	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks)	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks) End of Autumn terms Assessment	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks)	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks) End of Spring terms Assessment	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks)	Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks) End of Summer terms Assessment
	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:
	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework
8	Curriculum Topics Ratio and Scale. Multiplicative change. Multiplying & Dividing Fractions. Working in Cartesian Plane.	Curriculum Topics Collecting & Representing Data. Probability Nets, construction & Loci. Life Skills (Money Management).	Curriculum Topics Brackets, Equations & Inequalities. Sequences Indices Units & Compound Measure	Curriculum Topics Fractions & Percentages Standard index form Number sense  Sequencing:	Curriculum Topics Angles in parallel lines & Polygons. Area of Trapezia & Circles. Line symmetry & reflection.	Curriculum Topics The data handling cycle Pythagoras & Trigonometry Measures of location & Dispersion
	Sequencing: Ratio notation. Simplifying & comparing ratio. Ratio in the form 1:n. Dividing an amount by a ratio. Compound ratio. Parts of a circle. Area & circumference of a circle. Area & perimeter of arcs.	Sequencing: Collect data in a tally/frequency tables. Design a questionnaire. Collect data in a grouped frequency table. Design, complete and use two way tables. Identify correlation & draw a line of best fit.	Sequencing: Expand a single bracket Solve 1 step equations Expand single brackets & simplify. Solve 2 step equations Form and use expressions, formulae & identities. Form & solve equations	Convert between fractions, decimals & percentages. Find percentages using 10%, 5% etc Order fractions, decimals & percentages. Find percentages of an amount using a calculator. Represent one amount as a percentage of another.	Sequencing: Finding missing angles on a line, around a point & in a triangle. Identify different types of triangles. Complete simple tessellations. Find angles in a polygon. Recognise vertically opposite angles. Identify quadrilaterals based on	Sequencing: Draw & interpret a bar chart. Draw & interpret a pictogram. Interpret pie chart (equal segments) Draw & interpret dual bar charts. Bar & interpret bar line graphs. Interpret composite bar charts. Calculate angles to draw a pie
	Reading scales and maps. Identify similar & congruent shapes. Identifying & such scale factor on maps or diagrams. Problem solving involving scale. Use of length, area & volume scale factors for similar shape.	Complete a scatter graph & comment on correlation/relationship between variables. Use line of best fit estimate. Interpolation & Extrapolation from line of best fit. List outcomes of an event.	Factorise into a single bracket. Expand binomials Solve equations with brackets & unknowns on both sides. Introduce solving simultaneous graphically & algebraically Factorise a quadratic. Begin to solve quadratics. Form & solve equations involving ratio.	Use decimal equivalence to find a percentage of an amount. Find the original amount given a percentage. Use decimal multiplier to effect percentage change. Repeated percentage inc Reverse percentages.	properties. Find the angle sum of any polygon. Construct line & angle bisectors. Use the properties of 'special' triangles and quadrilaterals to obtain missing angles. Calculate interior & exterior angles.	chart. Represent data in a stem & leaf diagram. Identify and discuss misleading statistics. Compare data with back-back stem & leaf diagrams. Draw a box plot from a cumulative frequency graph & use to compare data.

















Use of diagrams to explain Calculate probabilities from Recognise and evaluate positive Construct perpendicular from fractions. simple events. Continue sequences by  $+ - x \div$ and negative powers of 10. point to a line. Use Pythagoras theorem to identify missing sides of a right-Use of number line with unit Sample space diagrams. Generate sequences using the Convert between standard form Circle theorems. fractions. Write lists of permutations for nth term. and normal numbers for small & Use of interior & exterior angles angled triangle. X and ÷ fractions by integers. combined events. Find the nth term of a linear large numbers. to obtain the number of sides of Use Pythagoras in 3D. X and ÷ fractions by fractions. Use Venn diagrams & set sequence. Order and compare numbers in a polygon. Identify sides of a right angle Expand into more complex rules Problem solving in real-life. notation to calculate probability. standard form. triangle. X & ÷ using mixed numbers. Solve x & ÷ problems in standard Complete a given sample space Find the nth term of a simple Recognise and use angles in Use trigonometry to find missing using it to calculate quadratic sequence. form. parallel lines. sides & angles in right-angled Use formulae to find the area of Plot coordinates in 4 quadrants. probabilities. Use the nth term to find a larger Use standard form in problem triangles. Identify equations of vertical & Understand relative frequency solving. squares, rectangles & triangles. Apply Trigonometry to real-life terms. Calculate volume by counting horizontal lines. as an estimate of probability. Use the nth term to decide if a Begin to manipulate answers problems. Plot linear graphs. Product rule for counting. number is in the sequence. given as surds. cubes. Identify gradient and y-Use of Venn diagrams to Use a quadratic nth term rule to Volume of a cuboid. intercept. calculate probability. generate a sequence. Mental strategies for + - . Area of compound shapes Plot quadratic graphs. Compound events, simple tree Round to nearest 10, 100, 100. involving squares, rectangles Investigate gradient of parallel & Know squares and roots to 15<sup>2</sup>. Order of operations and triangles. diagrams. perpendicular lines. Non-replacement and Know cube and cube roots to 53. Round to decimal places Use formulae to find the area of Length of a line segment. conditional probability. Recognise & evaluate higher Mental strategies for x & ÷ rhombuses, parallelograms & Interpret straight line graphs to powers. Mental strategies for x & ÷ trapeziums. solve simultaneous equations. Name common 3D shapes. Write expression using powers including decimals. Calculate the area of a circle. Analyse quadratics to identify Sketch and construct nets. Use index laws for  $x \div \& ()$ . Round to significant figures. Area of compound shapes roots & turning point. Calculate surface areas. Simplify problems involving Recognise and identify error involving circles. Recognise the form of quadratic, Scale drawings & simple indices. intervals. Area of sectors. Recognise the impact round has cubic & reciprocal graphs. bearings. Use powers to simplify Volume of a prism. Locus according to a simple rule. on the accuracy of an answer. Problem solving involving area. expressions. Loci & construction complex Substitute numbers into Recognise and use reciprocals. Area of circles and sectors in terms of Pi. expressions involving powers. Understand zero power. Application of upper & lower **Understanding & managing** Use negative powers. bounds on area. debt. Use simple fractional powers. Calculating pay & exploring Draw lines of symmetry. loans. Metric conversions. Reflect shapes in a mirror line Financial risk & security. Conversion between metric & Translate using a vector. Future of money. imperial. Reflect shapes in x= y= and Other conversions e.g. currency. describe reflections in x = y = .Use compound measure. Carry out single transformations Convert between area and enlargements, reflections, volume measures. translations & rotations. Distinguish formula by Define quadrilaterals based on considering dimensions. symmetry & diagonal properties Assessments: **Assessments:** Assessments: **Assessments:** Assessments: Assessments: End of block WIN/FBI sheet (Approximately every 2 weeks) (Approximately every 2 weeks)

















		End of Autumn terms Assessment		End of Spring terms assessment		End of Summer terms assessment
	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:
	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework
9	Curriculum Topics Basic Number, Basic algebra, Shape  Sequencing: Place Value, 4 operations, Types of number, Powers, Factors, Multiples, HCF/LCM, Indices, Standard form.  Function machines, Simplifying expressions, Substitution, Expanding, Factorising, Equations, Change of subject, Laws of Indices.  Names of 2D&3D shapes, Perimeter, Converting units, Area, Volume, Surface Area, Angle Properties, Congruence & Similarity.	Curriculum Topics Number Data Handling Shape  Sequencing: Scales/charts, Time, Order of Operations, Negative Numbers, Fractions, FDP, 4 operations with fractions & Mixed numbers, Round & Estimate, Bounds, 4 operations with numbers in Standard Form, Recurring Decimals.  Sampling, Grouped Frequency, Basic Diagrams & Graphs, Comparing data, Cumulative Frequency, Box Plots, and Histograms.  Angles & properties, Angles in a triangle, Angles in polygons, Circles, Circle theorems.	Curriculum Topics Algebra Data Handling Shape Probability  Sequencing: Forming Expressions, Forming & Solving Equations, Changing subject, Laws of Indices, Expanding quadratics, Factorise quadratics, Algebraic fractions, Simultaneous Equations.  Averages and Range from a list & frequency table, Two-way tables, Estimating averages.  Line & rotational symmetry, Tessellations, Transformations, Bearings, Loci & Constructions, Plans & elevations, Pythagoras, Trigonometry.  Probability Scales, Probabilities, Probability from 2 way tables, Tree diagrams for independent / dependent events.	Curriculum Topics Number Algebra Geometry  Sequencing: Finding a % non-calc and calc methods, % increase/ decrease, Rounding & Estimating, Proportion, Ratio, Expressing Fractions, 4 rules of fractions, FDP, Compound Units, Similar Shapes, Direct Proportion, Inverse Proportion, Growth & Decay, Bounds, Gradient of a straight line, Surds.  Simplifying expressions, Substitution, Solving Equations, Forming Equations, Change of Subject, Laws of Indices, Quadratic Factorising, Simultaneous Equations, Gradient of a straight line, Quadratic formula, Complete the square.  Constructions, Plans & elevations, Scales, Pythagoras, Trigonometry, Area of triangle using sine, Sine rule, Cosine rule.	Curriculum Topics Algebra Number Geometry Data Handling  Sequencing: Sequences, Quadratic Sequences, Coordinates, Straight line Graphs.  Negative Numbers, % increase/decrease, Reverse %.  Parts of a circle, area of a circle, circumference, Understanding & using vectors.  Stem & Leaf diagrams, Averages from a table, Histograms.	Curriculum Topics Algebra Data Handling Geometry  Sequencing: Straight line graphs, Distance- Time graphs, Quadratic / Cubic / Reciprocal / Exponential graphs, Inequalities, Substitution, Solving equations, Change of Subject.  Relative frequencies, Two-way tables, Tree diagrams for independent & dependent events, Graphical transformations, Trigonometric Graphs.  Angle properties, Angles in triangles, Angles in polygons, Circles, Circle theorems.
	Assessments: WIN/FBIs on Number WIN/FBIs on Algebra WIN/FBIs on Shape End of Term Assessment, QLA and Next Steps Therapy	Assessments: WIN/FBIs on Number WIN/FBIs on Data Handling / Shape End of Term Assessment, QLA and Next Steps Therapy	Assessments: WIN/FBIs on Averages WIN/FBIs on Shape / Probability End of Term Assessment, QLA and Next Steps Therapy	Assessments: WIN/FBIs on Number WIN/FBIs on Algebra / Geometry End of Term Assessment, QLA and Next Steps Therapy	Assessments: WIN/FBIs on Algebra / Number WIN/FBIs on Geometry / Data Handling End of Term Assessment, QLA and Next Steps Therapy	Assessments: WIN/FBIs on Algebra WIN/FBIs on Data Handling / Geometry End of Term Assessment, QLA and Next Steps Therapy

















	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:
	Homework: Weekly homework set on Show	Homework: Weekly homework set on Show	Homework: Weekly homework set on Show	Homework: Weekly homework set on Show	Homework: Weekly homework set on Show	Homework: Weekly homework set on Show
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10	My Homework  Curriculum Topics  Basic Number,  Basic algebra,  Shape  Sequencing:  Place Value, 4 operations, Types of number, Powers, Factors,  Multiples, HCF/LCM, Venn diagrams for HCF/LCM, Indices,  Standard form.  Function machines, Simplifying expressions, Substitution,  Expanding, Factorising,  Equations, Change of subject,  Laws of Indices, Change subject where subject occurs twice,  Expand 3 or more brackets,  Factorise quadratic with coefficient of x greater than 1 and solve the quadratic.  Names of 2D&3D shapes,  Perimeter, Converting units,  Area, Volume, Surface Area including Frustums of cones,  Angle Properties, Congruence & Similarity.	My Homework  Curriculum Topics Number Data Handling Shape  Sequencing: Scales/charts, Time, Order of Operations, Negative Numbers, Fractions, FDP, 4 operations with fractions & Mixed numbers, Round & Estimate, Bounds, 4 operations with numbers in Standard Form, Convert Recurring Decimals to fractions, Surds & Rationalising, Max & Min value of a calculation when numbers have been rounded, Direct & Inverse proportion.  Sampling, Grouped Frequency, Basic Diagrams & Graphs, Comparing data, Cumulative Frequency, Box Plots, Histograms, compare data using box plots.  Angles & properties, Angles in a triangle, Angles in polygons, Circles, Circle theorems, Proof of circle theorems, Similar Shapes & links between sides and areas / volumes.	My Homework  Curriculum Topics  Algebra Data Handling Shape Probability  Sequencing: Forming Expressions, Forming & Solving Equations, Changing subject, Laws of Indices, Expanding quadratics, Factorise quadratics, Algebraic fractions, Simultaneous Equations both linear and one non-linear.  Averages and Range from a list & frequency table, Two-way tables, Estimating averages.  Line & rotational symmetry, Tessellations, Transformations, Combined Transformations, Bearings, Loci & Constructions, Plans & elevations, Pythagoras, Similar shapes involving Pythagoras, Trigonometry, Area of triangle using Sine.  Probability Scales, Probabilities, Probability from 2 way tables, Tree diagrams for independent / dependent events, Conditional probability, Sampling including Stratified.	My Homework  Curriculum Topics Number Algebra Geometry  Sequencing: Finding a % non-calc and calc methods, % increase/ decrease, Rounding & Estimating, Proportion, Ratio, Expressing Fractions, 4 rules of fractions, FDP, Compound Units, Similar Shapes, Direct Proportion, Inverse Proportion, Growth & Decay, Bounds, Gradient of a straight line, Surds.  Simplifying expressions, Substitution, Solving Equations, Forming Equations, Change of Subject, Laws of Indices, more complex Fractional Indices, 4 rules of numbers in Standard form, Quadratic Factorising, Simultaneous Equations, Gradient of a straight line, Gradient of a point on a curve, Quadratic formula, Complete the square, Use of iteration, Functions.  Constructions, Plans & elevations, Scales, Pythagoras, Trigonometry, Area of triangle using sine, Sine rule, Cosine rule, Graphs of Trigonometric	Weekly homework  Curriculum Topics  Algebra Number Geometry Data Handling  Sequencing: Sequences, Quadratic Sequences, Coordinates, Straight line Graphs, Composite & Inverse Functions.  Negative Numbers, % increase/decrease, Reverse %.  Parts of a circle, area of a circle, circumference, Understanding & using vectors, Vectors for Geometric arguments & proof.  Stem & Leaf diagrams, Averages from a table, Histograms.	Weekly homework set on Show My Homework  Curriculum Topics Algebra Data Handling Geometry  Sequencing: Straight line graphs, Distance- Time graphs, Quadratic / Cubic / Reciprocal / Exponential graphs, Inequalities, Quadratic inequalities, Substitution, Solving equations, Change of Subject.  Relative frequencies, Two-way tables, Tree diagrams for independent & dependent events, Graphical transformations, Trigonometric Graphs.  Angle properties, Angles in triangles, Angles in polygons, Circles, Circle theorems, Proof of circle theorems.
	_	_	_	functions.	_	
	Assessments: WIN/FBIs on Number	Assessments: WIN/FBIs on Number	Assessments: WIN/FBIs on Averages	Assessments: WIN/FBIs on Number	Assessments: WIN/FBIs on Algebra / Number	Assessments: WIN/FBIs on Algebra

















	WIN/FBIs on Algebra WIN/FBIs on Shape End of Term Assessment, QLA and Next Steps Therapy Enrichment:	WIN/FBIs on Data Handling / Shape End of Term Assessment, QLA and Next Steps Therapy Enrichment:	WIN/FBIs on Shape / Probability End of Term Assessment, QLA and Next Steps Therapy  Enrichment:	WIN/FBIs on Algebra / Geometry End of Term Assessment, QLA and Next Steps Therapy Enrichment:	WIN/FBIs on Geometry / Data Handling End of Term Assessment, QLA and Next Steps Therapy Enrichment:	WIN/FBIs on Data Handling / Geometry End of Term Assessment, QLA and Next Steps Therapy Enrichment:
	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework
11	Curriculum Topics Exam Preparation	Curriculum Topics Exam Preparation	Curriculum Topics Exam Preparation	Curriculum Topics Exam Preparation	Curriculum Topics Exam Preparation	Curriculum Topics Exam Preparation
	<b>Sequencing:</b> Bespoke lessons based on QLA of end of yr10 assessment	Sequencing: Bespoke lessons based on QLA of end of term 1 assessment	Sequencing: Bespoke lessons based on QLA of end of term 2 assessment	Sequencing: Bespoke lessons based on QLA of end of term 2 assessment	Sequencing: Bespoke lessons based on QLA of end of term 4 assessment	Sequencing: Bespoke lessons based on QLA of end of term 4 assessment
	Assessments:	Assessments: Full GCSE exam series	Assessments:	Assessments: Full GCSE Exam series	Assessments: GCSE Exams paper 1	Assessments: GCSE Exams Paper 2 & 3
	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:	Enrichment:
	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly homework set on Show My Homework	Homework: Weekly GCSE exam practice papers	Homework: Weekly GCSE exam practice papers