Mathematics Year 8 Curriculum Map - 2025

	Autumn Term		
Y8	Topic Title: Autumn Unit 1 Percentages Big Question: How do I find percentages of an amount? How do I increase and decrease and amount by a percentage?	Topic Title: Autumn Unit 2 Money Big Question: How do I solve different types of proportion problems?	Topic Title: Autumn Unit 3 Indices Big Question: How do I solve questions involving index laws?
Links to NC	Define percentage as 'number of parts per hundred', interpret percentages and percentage changes as a fraction or a decimal, interpret these multiplicatively, express one quantity as a percentage of another, compare two quantities using percentages, and work with percentages greater than 100% I interpret fractions and percentages as operators	Solve problems involving direct and inverse proportion, including graphical and algebraic representations	Use integer powers and associated real roots
Assessments	CFU Percentages	CFU Money	CFU Indices

Y8	Topic Title: Autumn Unit 4 Equations <mark>Big Question:</mark> How do I solve linear equations?	Topic Title: Autumn Unit 5 Sequences Big Question: How do I identify, continue and generate terms from a term to term rule for a sequence/pattern? How do I recognise patterns? How do I recognise arithmetic sequences to generate terms and find	Topic Title: Autumn Unit 6 Ratio Big Question: How do I use factors with ratio? How do I link fractions with ratio? What are scaled drawings?
Links to NC	Use algebraic methods to solve linear equations in one variable (including all forms that require rearrangement)	the nth term? Generate terms of a sequence from either a term-to-term or a position-to- term rule Recognise arithmetic sequences and find the nth term Recognise geometric sequences and appreciate other sequences that arise.	Use ratio notation, including reduction to simplest form Divide a given quantity into two parts in a given part:part or part:whole ratio; express the division of a quantity into two parts as a ratio Understand that a multiplicative relationship between two quantities can be expressed as a ratio or a fraction
Assessments	CFU Equations	CFU Sequences	CFU Ratio

	Spring Term			
Y8	Topic Title:	Topic Title:	Topic Title:	Topic Title:
	Spring Unit 7 Rounding	Spring Unit 8 Coordinates	Spring Unit 9 Area	Spring Unit 10 Circles
	Big Question:	Big Question:	Big Question:	Big Question:
	How do I use place value to help	What are mid points?	How do I use and apply the area	How do I define a circles and its
	round numbers?		formulae for different shapes?	parts?
	How do I approximate and estimate		How do I convert between units of	How do I use the formulae for
	accurately?		area?	perimeter, area, and volume?
Links to NC	Round numbers and measures to an appropriate degree of accuracy [for example, to a number of decimal places or significant figures] Use approximation through rounding to estimate answers	Work with coordinates in all four quadrants	Derive and apply formulae to calculate and solve problems involving perimeter, area and volume	calculate and solve problems involving: perimeters of 2-D shapes (including circles), areas of circles and composite shapes
Assessme nts	CFU Rounding	CFU Mid Points	CFU Area	CFU Circles

	Spring Term			
Y8	Topic Title:	Topic Title:	Topic Title:	Topic Title:
	Spring Unit 11 Standard Form	Spring Unit 12 Venn Diagrams	Spring Unit 13 3D Shapes	Spring Unit 14 Surface Area and
	Big Question:	Big Question:	Big Question:	Volume
	What is standard form? Why and	What are combined events and	What are three-dimensional shapes?	Big Question:
	how do we use standard form?	probability diagrams?	What do the net and plan views look	How do I link volume and surface area
		How do I use Venn diagrams to	like for three-dimensional shapes	calculations to area of 2d shapes?
		solve LCM/HCF problems?		
Links to NC	Interpret and compare numbers in standard form A x 10n 1≤A<10, where n is a positive or negative integer or zero	Enumerate sets and unions/intersections of sets systematically, using tables, grids and Venn diagrams	Use language and properties precisely to analyse numbers, algebraic expressions, 2-D and 3-D shapes	Derive and apply formulae to calculate and solve problems involving perimeter, area and volume
Assessme nts	CFU Standard Form	CFU Venn diagrams	CFU 3D shapes	CFU Surface area and volume

	Summer Term			
Y8	Topic Title: Summer Term Unit 15 Linear Graphs <mark>Big Question:</mark> What are do graphs of equations and functions look like?	Topic Title: Summer Term Unit 16 Transformations <mark>Big Question:</mark> What are plane isometric transformations?	Topic Title: Summer Term Unit 17 Angles Big Question: What are the properties of polygons? How do I apply angle facts to a variety of problems?	Topic Title: Summer Term Unit 18 Statistical diagrams Big Question: How do I interpret and show data? What are stem and leaf diagrams?
Links to NC	Recognise, sketch and produce graphs of linear functions of one variable with appropriate scaling, using equations in x and y and the Cartesian plane.	Identify properties of, and describe the results of, translations, rotations and reflections applied to given figures	Derive and use the sum of angles in a triangle and use it to deduce the angle sum in any polygon, and to derive properties of regular polygons	Construct and interpret appropriate tables, charts, and diagrams. Calculate and interpret measures of central tendency and spread, including consideration of outliers
Assessment	CFU Linear Graphs	CFU Transformations	CFU Angles	CFU Statistical diagrams

	Summer Term			
Y8	Topic Title: Summer Term Unit 19 Inequalities Big Question: What are inequalities on a number line?	Topic Title: Summer Term Unit 20 Brackets <mark>Big Question:</mark> What are algebraic expressions?	Topic Title: Summer Term Unit 21 Algebraic Fractions Big Question: How do I use the four operations with fractions?	Topic Title: Summer Term Unit 22 Recurring Decimals <mark>Big Question:</mark> What are recurring decimals?
Links to NC	Understand and use the concepts and vocabulary of expressions, equations, inequalities, terms and factors	Simplify and manipulate algebraic expressions by taking out common factors.	Use the four operations, including formal written methods, applied to integers, decimals, proper and improper fractions, and mixed numbers, all both positive and negative	Work interchangeably with terminating decimals and their corresponding fractions
Assessmen t	CFU Inequalities	CFU Brackets	CFU Algebraic Fractions	CFU Recurring Decimals