

Foundation GCSE Maths Curriculum Map

	Topic	Content
Year 9	1 Calculations 1 (Number)	To understand place value, including ordering integers (+/-) To round numbers To add and subtract decimals & integers (+/-) To multiply and divide decimals & integers (+/-) To solve problems with four operations
	2 Expressions (Algebra)	To know what is meant by expression, equation, formulae and term To form expressions To substitute into expressions and formulae To simplify expressions, and collect like terms To know and use the laws of indices To expand a single bracket and simplify To factorise a single bracket
	3 Angles and polygons (Geometry)	To know and use angle facts To know and use angles on parallel lines To know properties of triangles and quadrilaterals to find missing To understand congruence and similarity To find polygon angles
	4 Handling data 1 (Statistics)	To know methods of sampling including simple random sample To organise data in to frequency tables and stem and leaf To represent data in bar charts and pictograms and interpret To draw and interpret stem-and-leaf diagrams To represent data in pie charts and interpret To find all averages and spread from a list and a frequency table To compare distributions To draw scatter graphs To identify correlation
Year 10	5 Fractions, decimals and (Ratio and Proportion)	To convert between decimals, fractions and % To find fractions and percentages of amounts To do four calculations with fractions
	6 Formulae and functions (Algebra)	To substitute into formulae To use standard formulae and re-arrange To solve equations, identities and functions To use function machines To expand and simplify double brackets To factorise quadratics
	7 Working in 2D (Geometry)	To measure and draw lengths and angles To use bearings To find area of a 2D shape including compound To translate, rotate and reflect shapes To describe transformations To enlarge shapes
	8 Probability (Probability)	To calculate probability from experiments To calculate expected outcomes To calculate theoretical probability To identify mutually exclusive events
	9 Measures and accuracy (Number)	To round to significant figures To estimate and find error intervals To use calculator methods To use correct measures To convert between metric units To use compound measures
	14 Graphs 1 (Algebra)	To draw straight-line graphs from a table of values and using To find and use the equation of a straight line To find the gradient of a line To identify parallel lines To draw and interpret kinematic graphs
	10 Equations and inequalities (Algebra)	To solve one and two step equations To solve linear equations with brackets and unknown on both sides To solve linear equations with fractions To solve quadratic equations by factorisation To solve simultaneous equations algebraically (and graphically) To solve inequalities and represent on a number line
	12 Ratio and proportion (Ratio and proportion)	To represent a proportion To simplify and share in a ratio To use ratio and scales To find % of an amount and % increase/decrease To find percentage change To find reverse percentages
	13 Factors, powers and roots (Number)	To find factors and multiples To do prime factor decomposition To find HCF and LCM To use powers and roots
	15 Working in 3D (Geometry)	To know the properties of 3D shapes and their nets To draw and use plans and elevations To find the volume of a prism To find volume and surface area
	16 Handling data 2 (Statistics)	To draw and interpret frequency diagrams To interpret and draw bar charts and pictograms To draw and interpret stem-and-leaf diagrams To interpret and draw pie charts Calculating averages from a list To find averages and spread from frequency tables including To compare distributions To draw and interpret scatter graphs and identify correlation To draw and interpret time series graphs
	17 Calculations 2 (Number)	To calculate with roots and indices To do exact calculations To use standard form
	18 Graphs 2 (Algebra)	To plot and identify properties of quadratic functions To sketch cubic and reciprocal functions To draw and interpret real-life graphs
	19 Pythagoras and trigonometry (Geometry)	To use Pythagoras' theorem To use SOHCAHTOA for missing sides and angles To use vectors in column form and a diagram To recognise parallel vectors
11 Circles and constructions (Geometry)	To know parts of a circle and find circumference and area To find area of a sector and length of an arc To perform standard constructions using compasses To solve loci using constructions	
20 Combined events (Probability)	To use sets To draw and use possibility spaces To draw and use tree diagrams with and without replacement	
21 Sequences (Algebra)	To describe and use sequence rules To find the nth term of a linear sequences To know special sequences	
Year 11	22 Units and proportionality (Ratio and proportion)	To use compound measures To use direct proportion To use inverse proportion To solve growth and decay problems including simple and compound interest and depreciation
Year 11 Revision SOL		

Literacy (including reading)	Key words issued at the start if every topic. Problem solving questions integrated into lessons.
Spiritual, Moral, Social and Cultural	To analyse and interpret data. To accurately measure and draw lines and angles. To understand bearings and scales. To use and calculator and understand the errors introduced through rounding. To represent and analyse data. To draw and interpret real life graphs. To calculate interest and depreciation and how this relates to spending and saving.
British Values	Use MWB in classrooms to develop independence, self-esteem and build confidence. Within lessons, respect is encouraged and anything other than this is challenged. Mistakes are welcomed and used as discussion points to address misconceptions. A variety of approaches to solving problems are taught and discussed. Students are encouraged to develop resilience (linked to developing life long learners). Students are given a choice of tasks in lessons (red, amber, green/bronze, silver, gold) often linked to their levels of learning. E-safety is promoted through blended learning opportunities (MathsWatch)
Cultural Capital	