Foundation GCSE Maths Curriculum Map

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