Y9 Scheme of Work – AQA GCSE Maths 8300

Support Tier

Term	Week	Lessons	Coding refers to AQA Teaching Guidance Sections. Underlined parts are for most able. Red indicates Future SOW Notes
		4	Angles: G1, G3
	1		Draw and measure angles, key vocab (types of angles) and estimating angles
			Angles at a point, line, vertically opposite
			Angles in quadrilaterals and triangles
			Introduction to basic parallel line rules (corresponding, alternate, co-interior)
	2	4	Factors and Multiples: N4, N5
			Multiples and LCM
			Factors and HCF
			Prime numbers and prime factor decomposition
			KPI Task: C1
			Basic Number: N1, N2, N3, N14
	3	3	4 operations with positive integers
_			4 operations with negative integers
עע			Word problems/exam questions with basic operations
Autumn 1	4	3	Scale Diagrams and Bearings: R2, G15
¥			Recap angles, 8 compass points and associated bearings
			Drawing and interpreting three figure bearings
			Maps, diagrams and scale factors
	5	4	Basic Algebra: A1, N3, A3, A4
			Revisited in Y10 - more advanced examples then, including double brackets
			Simplifying - collecting like terms
			Multiplying terms (and basic dividing) - link to laws of indices
			Expanding a single bracket
			Factorise fully into a single bracket
	6	3	Basic Fractions: N1, N2, N8
			Equivalent fractions and simplifying fractions
			Adding and subtracting fractions
			Multiplying and dividing fractions
	7	3 OR 4	EXAM WEEK

			Collecting and Representing Data: \$2, \$4
			Types of data, basic data collection, frequency tables
	8	4	Bar charts - drawing and interpreting
			Pictograms - drawing and interpreting
			Pie charts - calculating angles, drawing, basic interpreting
		5	Coordinates and Linear Graphs: A8, G11, A9
			Revisited in Y10 - more on gradient, y intercept and rearranged
			formats then
	9		Coordinates in 4 quadrants recap, vertical (x=a) and horizontal (y=b) lines
	AND 10		Substitution and completing a table of values
	10		Plotting y=mx+c graphs
			Understanding gradient and y intercept, sketching/visualising graphs
			from equation
			KPI task: C2
Autumn 2			Basic Decimals: N1, N2, N10
Ę	i.	4	Ordering decimals (of varying decimal places too)
1 5	11		Adding and subtracting decimals (varying decimal places) Ext -
<			include negatives
			Multiplying decimals Ext - including negatives
			Dividing a decimal by an integer Ext - dividing by a decimal Rounding: N15, N16
		3	Recap of rounding to powers of 10, rounding to a given number of
	12		decimal places
	12		Rounding to significant figures
			Estimating calculations by rounding to 1sf Ext - word problems
			Sequences: A23, A24
	13	3	Term to term rules, special sequences (square, triangle, cube Ext -
			Fibonacci)
			Recap substitution, generating a sequence from nth term
			Finding n th term of a linear sequence (increasing and decreasing) Ext
			- decimal terms
	14	3 OR 4	Financial Maths
			Resources in Course materials. Includes one Pod lesson

		6	Basic Percentages: R9, N12 remember to always include percentages > 100% Percentages revisited in Y10
	15		Understand percentages as parts per 100, express a quantity as a fraction and a % of another
	AND		Express a quantity as a % of another - when changing units required
	16		Express a quantity as a % of another - word problems/problem solving
			KPI task C3
			Finding a % of an amount using the 10% method
			Finding a % of an amount using a decimal multiplier
		7	Introduction to Perimeter and Area: G12, G17, G16, G17
			More in Y10 - more surface area then, and properties of other shapes
			Area (and perimeter) of basic shapes - rectangle, triangle,
_			parallelogram. Extend to include finding missing length
Spring 1	17		Area of a trapezium
Spi	17 AND		Area of compound shapes including rectangle/rectangle, rectangle/triangle, other quadrilaterals compounded
	18		Problem solving with perimeter and area (including algebra, missing lengths etc)
			KPI task: C4
			3D shapes - key vocabulary (faces, vertices, edges) and properties
			Extend to include nets
			Surface area of a cuboid
			Real Life Graphs: A14, R14
	19		Time series graphs in various contexts - draw basic, interpret
	AND	5	Conversion graphs - linear (°C to °F, km to miles, £ to \$ etc)
	20		Read and interpret various graphs in real life contexts
			Draw distance time graphs - from tables or written descriptions
			Interpret distance time graphs
		6	Introduction to Circumference and Area: G9, G17 Repeat in Y10
			Parts of a circle, key terms, introduction to Pi Circumference of a circle
	21		Area of a circle
	AND		Circumference and area practice
	22		Perimeter and area of semicircles and parts of circles
			Problem solving with circumference and area
			Extend to include compound shapes
			Equations: A2, A17 Revisited in Y10 as part of simultaneous equations
Spring 2			Solving basic one and two step equations recap
Oric	23	6	Solving equations with brackets, fractions and squares
22	AND		Practice of solving equations with an unknown on one side only
	24		Solving equations with an unknown on both sides
			Solving equations with an unknown on both sides practice
			KPI task: C5
	25	4	Ratio and Proportion: N11, R3, R4, R5, R6, R7, R8
			Simplifying ratios Ext - form 1: n or n:1
	AND		Splitting an amount in a given ratio
	26		Splitting in a given ratio word problems/practice
			One known amount problems

			Scatter graphs: S6
	27	4	Plotting a scatter graph
			Drawing lines of best fit, types of correlation and interpreting in
			context
			Using a line of best fit to interpolate, understand interpolation and
			surrounding issues
			KPI task: C6
		7	Indices: N6, N7 Revisit in Y10 as part of a number recap
			Recap of multiplication by hand, use to find square and cube
			numbers
	28		Using calculator to calculate powers and roots
	28 AND 29		Find and know powers of 2, 3, 4, 5 and 10
			Multiplying law
<u>_</u>			Dividing law
J			Power law and zero law
Summer 1			Practice of index laws, including combinations
Sı			Extend to include link back to multiplying or dividing algebraic terms
		4	Pythagoras: G20
	30		Recap of squaring and square rooting on calculator, discover
			Pythagoras'
			Finding the hypotenuse
			Finding a short side
			Pythagoras' practice - mixture
	31 AND 32	5	Standard Form: N2, N9 Revisit in Y10 as part of a number recap
			Powers of 10 recap, place value, multiplying and dividing by powers
			of 10
			Large numbers - number to standard form
			Large numbers - standard form to number
			Small numbers - number to standard form
			Small numbers - standard form to number

	33 AND 34	8	Transformations: G7, G24
			Recap of vertical (x=a) and horizontal lines (y=b) and y=x and y= -x
			Carrying out a reflection in a given line (drawn or from equation)
			Describing a reflection
			Translations using a vector - perform and describe
			Rotations with a centre
			Rotations practice Extend to include describing a rotation
			Enlargement by a scale factor on a grid (no centre) Extend to include fractional scale factors
			Enlargement from a centre OR describing an enlargement with no centre
			Introduction to trigonometry: G20, R12
, 5		4	Revisited in Y11 - do finding sides then or somewhere in Y10
Ле	35		Labelling sides
Summer 2	AND 36		Using a calculator to work with sin, cos and tan, incorporating other calculator skills
			Finding an angle
			Finding an angle practice
	37 AND 38	4 or 5	Basic Probability: P1, P4, P7 Revisited in Y10 - frequency trees, tree diagrams, more challenging parts of topic then
			Key FDP equivalents, basic probability - scale, concept of 0 to 1, emphasis on NEVER A RATIO
			Probabilities of basic events - coins, cards, spinners etc
			Mutually exclusive events - adding to 1
			Listing outcomes of 1 and 2 events and calculating probabilities
			2-way tables
	14	3 OR 4	Financial Maths
	14	3 OR 4	Includes one Pod lesson