

Y10 Scheme of Work – AQA GCSE Maths 8300

Foundation Tier

Term	Week	Lessons	
Autumn 1	1 and 2	6	Calculating with Percentages: R9
			Recap of basic percentages - FDP equivalents, one amount as a percentage of another and percentage of an amount (both with and without a calculator)
			Recap of basic percentages - FDP equivalents, one amount as a percentage of another and percentage of an amount (both with and without a calculator)
			Finding the percentage change when given the amounts
			Percentage increase and decrease. By addition & subtraction. Include simple interest
			Use of multipliers & reverse percentages (finding the original value) (E set don't do this) (Compound interest and repeated change is in Y11)
			Mixed exam questions on all percentages
	3	3 or 4	Measures: N16, G14, N13, R1, R11
			Revision of metric units used for length, volume, mass and their metric conversions.
			Compound measures - Speed, density and pressure.
			Limits of accuracy with measures (N16) (E set don't do this)
			Mixed exam question practice on these topics
	4 and 5	6	Statistical Measures: S4, S5, S1
			Revise finding mean, median, mode and range from a list (and creating a list when given the mean, median, mode and range). Revise meaning of discrete and continuous and outlier.
			Revise finding mean, median, mode and range from a frequency table and a bar chart
			Revise finding mean, median, mode and range from a grouped frequency table. Discuss disadvantages of grouped data
			Comparing two data sets
			Sampling - definition of sample/population, methods of sampling, using sample data to predict for population (limitations of sampling)
			Mixed exam questions on statistics
	6	3 or 4	2D representations of 3D shapes: G13
			Revise names of 3d shapes and faces, edges & vertices. Draw plan, front and side elevation of cube, cylinder, cone, prism etc
			Nets - draw nets of 3D shapes. Interpret nets and predict the 3D shape they will make.
			Isometric drawing and plans and elevations with cubes
			Mixed exam questions on this topic or make some more 3d shapes from nets
	7	3 or 4	Revision and assessment
			Revision lesson
			Assessment

Autumn 2	8 and 9	6	Properties of Polygons: G3, G4
			Revise angle properties and angles in parallel lines (from year 9 week 1)
			Triangles - names & properties, calculating missing angles and sides
			Quadrilaterals - names, properties and missing angle calculations
			Polygons (1) - Names of polygons and calculation of interior and exterior angles
			Mix of exam questions (including problem solving type) on angles in polygons and parallel lines
			Algebra Recap and Extension: A3, A4, A35, A17
	10 and 11	6	Recap vocabulary and expanding and factorising (with single term outside)
			More complex expanding and factorising with multiple terms outside bracket and negatives
			Solve equations with balance method two step including with brackets
			Solve equations with unknowns on both sides
			Find the nth term of linear sequence
			Exam questions practice
			Construction and Loci: G2
	12 and 13	5	Construct triangles
			Construct perpendicular bisector, perpendicular from given point to line, perpendicular from point on line and parallel lines
			Construct angle bisector, 60 degree angle, 90 degree angle, 45 degree angle
			Construct loci and start to solve loci problems in context
			Revision lesson
	14	2 or 3	Catch up week
			More time on loci and constructions as needed
			Extra time to catch up on any topics from the term
			Number work or Christmas fun!
Spring 1			Simultaneous Equations
	15 and 16	5 or 6	Solve simultaneous equations by elimination where one variable has the same coefficient
			Solve linear simultaneous equations by elimination where neither variable has the same coefficient
			Solve simultaneous equations by substitution where one variable has the same coefficient
			Solve linear simultaneous equations in context (forming the equations)
			Solve linear simultaneous equations from graphs
			More practice as required
			Further Perimeter and Area: G12, G16, G17
	17 and 18	6	Perimeter and area of rectangles, parallelograms, triangles and trapeziums
			Perimeter and area of rectangles, parallelograms, triangles and trapeziums
			Area of composite shapes

			Surface area of cuboids and prisms
			Surface area of pyramids and composite solids
			Mix of problem-solving area exam questions
			Revision and assessment
	19	3	Catch up
	20	3	Revision
Spring 2	21 and 22		EXAM FORTNIGHT
			Probability
	23	3	Basic probability recap
			Frequency trees to show probability
			Sample space diagrams
	24 and 25	6	Linear Graphs: A9, A10, A21
			Draw straight line graphs from a table of values
			Draw straight line graphs from a table of values
			$y = mx + c$ and gradient and intercept / identifying parallel lines
			Equation of a line through 2 points
			Exam questions to practise skills
	26	3	Congruence and Similarity: G5, G6, G19
			Definition of congruence and conditions for congruent triangles,
			Definition of similarity and identification of similar shapes
			Calculation of scale factor and missing sides and angles and perimeters in similar shapes (G19)
Summer 1	27	3	Congruence and Similarity: G5, G6, G19
			Mix of geometrical problem solving (G6) inc Pythagoras and isosceles triangles
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	28 and 29	6	Further Circumference and Area: G9, G17, G18, N8
			Properties and vocabulary of circles, area and perimeter of circles formulae
			Apply formula for area of a circle to circles and sectors inc in terms of pi
			Apply formula for perimeter of circle to circles and sectors including in terms of pi
			Area and perimeter of composite shapes including circles
			Surface area of cylinder and cone
	30 and 31	5 or 6	Volume
			Volume of cuboid and prism
			Volume of cylinder including exact with pi
			Volume of spheres, pyramids and cones
			Volume of composite solids
			Extra time for volume or topics done badly in the exam
	32	3 or 4	Catch up

Summer 2	33 and 34	6	Probability
			Two-way tables
			Venn diagrams
			Tree diagrams
	2/4/1 900	2 or 3	Number work
			Number work depending on class
	36 and 37	6	Transformations: G7, G11 (or other geometry depending on exam questions done badly)
			Area and perimeter of composite shapes including circles
			Translations
			Rotations
			Enlargements
			Geometry recap
	38 and 39	6	Algebra recap (depending on exam questions done badly)
			Collecting like terms and laws of indices (A4)
			Expanding and factorising single brackets
			Solving equations
			Substituting into formulae
			Plotting $y = mx + c$ graphs and recognising gradient and intercept
			Any other additional algebra practice as required