



Week	36	37	38	39
W/C Date	25-Jun	2-Jul	9-Jul	16-Jul
Topic	Numbers and the number system	Numbers and the number system	Calculating	Calculating
Key Objectives	Prime factorisation, LCM, HCM using Venn diagrams	Rounding, significant figures, standard form	4 operations with negative numbers. Square and cube neg. nos.	Formal written methods for long multiplication & short division
Assessment		8M2 BAM		
Homework				

Mathematics Year 8 grade 3+ long term plan (Stage 8)

	Assessment weeks
	Moderation week
	Data Capture
	STAR marking
	Exit Poll

Key Skills to be Covered

Number: 4 operations; BIDMAS; prime factors; rounding; standard form; fraction/decimal/percentage equivalences; laws of indices.
Algebra: linear equations; factorisation; simple rearrangements of equations; linear sequences; graphs of linear functions and quadratic graph.
Shape and Space: Angles in parallel lines & polygons; area & volume; area & circumference of a circle; bearings; enlargement; using scales.
Data and Probability: theoretical probability; estimated mean; statistical diagrams.
Ratio and Proportion: division in a given ratio; proportion using a multiplier.

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
W/C Date	03-Sep	10-Sep	17-Sep	24-Sep	01-Oct	08-Oct	15-Oct		29-Oct	05-Nov	12-Nov	19-Nov	26-Nov	03-Dec	10-Dec	17-Dec		
Topic	Calculating	Calculating	Visualising and Constructing	Visualising and Constructing	Understanding risk 1	Algebraic Proficiency	Algebraic Proficiency		Fractions, Decimals and Percentages	Proportional Reasoning	Proportional Reasoning	Enrichment, Consolidation and Revision	Assessment/ Sequences	Sequences	Investigating Angles	Investigating Angles		
Key Objectives	BIDMAS	Powers and roots. Efficient use of a scientific calculator to calculate with neg.nos., fractions and indices.	Enlargement of 2D shapes, use centre and positive & fractional scale factors.	Understand and use bearings. Scale drawings. Represent 3D objects, plans & elevations.	Understand probability. Use the language of probability, experimental & theoretical outcomes.	Notation of algebra. Simplification and like terms. Factorisation. Use the laws of indices to simplify. Know the zero index.	Substitution with + and - numbers. Change the subject of a formula, lone and two steps.		Identify terminating & recurring decimals. Know key equivalents. Simplify fractions. Change fractions to decimals.	Explore the uses of ratio. Solve problems with ratio, scaling and proportion. Relate ratios to fractions.	Compound units e.g speed, conversions. Problems in context e.g pricing. Multiplicative relationships.		Generate terms of a sequence from a term-to-term rule	Generate terms from a position-to-term rule Find the nth term. Use the nth term to solve problems.	Understand and use alternate and corresponding angles in parallel lines. Solve problems involving angles.	Derive and use the sum of angles in a triangle (angle sum in any polygon, exterior and interior angles. Christmaths activities.		
Assessment		8M1 BAM			8M13 BAM	8M3 BAM	8M8 BAM		8M4 BAM		8M5 BAM			8M9 BAM				
Homework																		

Week	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
W/C Date	07-Jan	14-Jan	21-Jan	28-Jan	04-Feb	11-Feb		25-Feb	04-Mar	11-Mar	18-Mar	25-Mar	01-Apr	08-Apr		
Topic	Calculating with Fractions, decimals and percentages	Calculating with Fractions, decimals and percentages	Solving equations	Calculating Space. The circle	Calculating Space	Algebraic Proficiency		Algebraic Proficiency	Algebraic Proficiency	Maths for science week	Understanding Risk 2	Understanding Risk 2	Presentation of Data	Measuring Data		
Key Objectives	Apply the four operations to proper fractions, improper fractions and mixed numbers.	Work with percentages greater than 100%, multiplier for a percentage increase or decrease.	Solve linear equations with the unknown on both sides of the equation, including with fractions and brackets.	Definitions and properties: centre, radius, chord, diameter, circumference	Calculate the area of composite shapes that include sections of a circle Calculate the volume of a	Plot graphs of linear equations including horizontal and vertical lines and of the form: $y = mx + c$,		Identify and interpret gradients and intercepts of linear functions graphically	Recognise, sketch and interpret graphs of linear functions and simple quadratic functions of the form $y = x^2 \pm c$.		Develop understanding of probability finding outcomes using systematic listing, two-way tables and tree diagrams.	List all elements in a combination of sets using a Venn diagram. Understand experimental and theoretical probability. Calculate	Construct and interpret a grouped frequency table for continuous data. Construct and interpret histograms for	Plot a scatter diagram. Interpret a scatter diagram using understanding of correlation to describe the relationship		



	Interpret fractions and percentages as operators	Solve problems involving percentage change, original value problems and financial problems including simple interest	Find approximate solutions to linear equations using a graph.	Calculate the circumference of a circle and the perimeter of composite shapes that include sections of a circle	prism and a cylinder. Solve problems	$x \pm y = c$ and $ax \pm by = c$			Plot and interpret distance-time graphs (speed-time graphs)		Use the language of probability.	expected outcomes.	grouped data with equal class intervals.	between variables.		
Assessment		8M6 BAM	8M10BAM		8M12 BAM				8M11 BAM			GCSE Qs		GCSE Qs		
Homework																

Week	35	36	37	38	39	40	41	42	43	44	45	46	46
W/C Date	29-Apr	06-May	13-May	20-May		03-Jun	10-Jun	17-Jun					
Topic	Measuring Data	Revision and Consolidation	End of Year Assessment	Using Scientific Formulas		Calculating (Stage 9)	Calculating (Stage 9)	Algebraic Proficiency (Intro Stage 9)					
Key Objectives	Find the modal class, the class containing the median with grouped data. Calculate an estimated mean. Analyse and compare two distributions.	Opportunity to also include some problem solving activities.		Substitution and practical application.		Indices: +ve, -ve, fractional, evaluating with and without a calculator	Standard Form: 4 operations, calculator methods, rounding (inc limits), truncating.	Identities. Multiplying linear expressions to form quadratics.					
Assessment	GCSE Questions						BAM 9M1						