

Year 8 - Long Term Plan

Year	Term	Week	Topic	Code	Content	Resources
Year 8	Autumn term	1	1 Whole numbers and decimals (Number)	3B 1a	Powers of 10	N1, N8
				3B 1b	Rounding	N13, N14
				3B 1c	Factors, multiples and primes	N3
				3B 1d	Estimating and approximating	N13, N14
			2 Measure, perimeter and area (Geometry and measures)	3B 2a	Measures 1	R1
				3B 2b	Measures 2	R1, N12
				3B 2c	Area of a 2-D shape	G1
		3B 2d		Circumference of a circle	G7, G2	
		3B 2e		Area of a circle	G7, G2	
		3 Expressions and formulae (Algebra)	2B 3d	Expanding brackets	A4	
			3B 3a	Factors in algebra	A4	
			3B 3b	Algebraic fractions	DF5	
			3B 3c	Formulae in context	A2	
			3B 3d	Rearranging formulae	A5	
		Case study	3B CS1	Case study 1: Why do bikes have gears?	RM5, SP4	
		2	4 Fractions, decimals and percentages (Number)	3B 4a	Adding and subtracting fractions	N4
				3B 4b	Multiplying fractions	N4, N11
				3B 4c	Dividing by fractions	N4, N11
				3B 4d	Decimals and fractions	N9
				3B 4e	Percentage change	N10, R8
				3B 4f	Percentage problems	DF2, DF5, R8
	5 Angles (Geometry and measures)		3B 4g	Financial maths 1: Repeated percentage change	R8, SP2	
			2B 5c	Angles in parallel lines	G11	
			3B 5a	Angle properties of a triangle	G10, G11	
			3B 5b	Angle properties of a quadrilateral	G13, G5	
			3B 5c	Angle properties of a polygon 1	G12, G5	
	6 Graphs (Algebra)		3B 5d	Angle properties of a polygon 2	G12	
			3B 5e	Congruent shapes	G6	
			3B 6a	Tables of values	A9	
			3B 6b	Drawing straight-line graphs	A9	
			2B 6b	Equation of a straight line	A9, A12	
			3B 6c	Gradient of a straight-line graph	A11	
			3B 6d	y-intercept of a straight-line graph	A11, A10	
			3B 6e	The equation $y=mx+c$	A11, DF6	
			3B 6f	Equations given implicitly	A11, A9, A12	
	Case study		3B 6g	Real-life graphs	A13	
		3B 6h	Distance-time graphs	A6, R10		
		3B 6i	Time series	A6, S1		
		3B CS2	Case study 2: Jewellery business	RM1, SP1, SP2		
		1	7 Decimal calculations (Number)	3B 7a	Adding and subtracting decimals	N4
	3B 7b			Multiplying decimals	N4, DF2	
	3B 7c			Dividing decimals	N4, DF2	
3B 7d	Using a calculator			N5, N15		
3B 7e	Interpreting the calculator display			N14, N15		
8 Statistics (Statistics and probability)	3B 8a		Planning a project	RM7		
	3B 8b		Data collection	RM7		
	3B 8c		Frequency tables	S2		
	3B 8d		Statistical diagrams 1	S2		
	3B 8e		Statistical diagrams 2	S3		
	3B 8f		Calculating averages	S1		
	3B 8g		Interpreting graphs	S2, RM7		
	2B 8g		Scatter graphs and correlation	S3		
	3B 8h		Correlation	S3		
	3B 8i		Averages from grouped data	S1		
9 Transformations and scale (Geometry and)	3B 8j	Comparing distributions	S1, S2			
	2B 8h	Stem-and-leaf diagrams				
	3B 8k	Communicating the results of an enquiry	DF7			
	3B 9a	Transformations	G8			
	3B 9b	Enlargements	G9			
	3B 9c	Combinations of transformations	G8, G9			
	3B 9d	Maps and scale drawings	R2			

Year 9	Spring	2	measures)	3B	9e	Bearings	G3
			Case study	3B	CS3	Case study 3: Climate change	DF7, RM7
			10 Equations (Algebra)	3B	10a	Solving equations	N6, A7
				2B	10b	Solving multi-step equations	A7
				3B	10b	Equations with brackets	A7, A4
				3B	10c	Unknown on both sides	A7, A4
				3B	10d	Constructing equations	A6, DF4
				3B	10e	Trial and improvement	A2
			11 Powers and roots (Number)	2B	11d	Order of operations	N5, N15
				2B	1f	Squares and cubes	N7
				3B	11a	Square roots and cube roots	N7, N16
				3B	11b	Indices	A1
	3B	11c		Indices and surds	N15, N7		
	3B	11d		Standard form for large numbers	N8		
	12 Constructions and Pythagoras (Geometry and measures)	3B	11e	Standard form for small numbers	N8, N12		
		3B	12a	Constructing a triangle 1	G6, G9		
		3B	12b	Constructing a triangle 2	G6, G9		
		2B	12e	Loci			
		3B	12c	Loci and constructions	G4		
		3B	12d	Pythagoras' theorem 1	G13, G14		
	3B	12e	Pythagoras' theorem 2	G14			
	Case study	3B	CS4	Case study 4: Garden design	RM5, DF5		
	Summer term	1	13 Sequences (Algebra)	3B	13a	Sequences and terms	A14
				3B	13b	Position-to-term rules	A15, DF3
				3B	13c	The general term	A14, A15
				3B	13d	Real life sequences	A14, A15, RM4
				2B	13d	Geometric sequences	A16
				3B	13e	Recursive sequences	A16
			14 3D shapes (Geometry and measures)	3B	14a	3-D shapes	G15, RM5
				3B	14b	Plans and elevations	G15
				3B	14c	Symmetry of a 3-D shape	
		3B	14d	Surface area of a prism	G1		
		3B	14e	Volume of a prism	G1		
Case study		3B	CS5	Case study 5: Golden rectangle	RM4, RM5, SP3		
15 Ratio and proportion (Ratio and proportion)		3B	15a	Direct proportion	R9		
		3B	15b	Comparing proportions	N9, N10		
		3B	15c	Ratio	R4, R5		
		3B	15d	Uses of ratio	R2, R3		
		2B	15d	Ratio and proportion	R9, RM2, R6		
		3B	15e	Ratio and proportion problems	R6, R8, RM2		
	3B	15f	Proportional reasoning	RM6, R9			
3B	15g	Financial maths 2: Living on a budget	SP2				
2	16 Probability (Statistics and probability)	3B	16a	Prediction and uncertainty	P1		
		3B	16b	Mutually exclusive events	P1		
		3B	16c	Calculating probabilities	P2		
		3B	16d	The outcomes of two trials	P4		
		3B	16e	Experimental probability	P1		
		3B	16f	Comparing theoretical and experimental probabilities	RM7		
	2B	16e	Sets	P3			
	3B	16g	Venn diagrams	P3			
	Case study	3B	CS6	Case study 6: Crime scene investigation	DF4, DF6		
	17 Everyday maths (Real life maths)	3B	17a	The AfriLinks project	RM7		
		3B	17b	Building the schoolhouse	RM5, SP1, SP3, SP4		
		3B	17c	Laying the path	DF3, SP1, SP3, SP4		
3B		17d	The basketball court	RM7, SP1, SP3, SP4			
3B		17e	The school garden	RM2, SP1, SP3, SP4			