

Year/Term/Half term		Chapter/Book/Lesson		Topic	KS3 Ref				
Year One	Autumn term	1	1 Whole numbers and decimals (Number)	1C 1a	Place value and decimals	N1, N2			
				1C 1b	Multiply and divide by 10, 100 or 1000	Y5-N-MD-7, N4, N1			
				1C 1c	Negative numbers	N2, N4			
				2C 7a	Arithmetic with negative integers	N2, N4			
				1C 1d	Mental addition and subtraction	N4			
				1C 1e	Written addition and subtraction	N4			
				1C 1f	Calculator methods 1	N15			
			2C 1e	Indices	N7				
			Year One	Autumn term	1	2 Measures, perimeter and area (Geometry and measures)	1C 2a	Units of measurement	N12
							1C 2b	Converting between units	R1
1C 2c	Perimeter and area of a rectangle	G1, G2							
1C 2d	Perimeter and area of a triangle	G1, G2							
1C 2e	Area of a parallelogram and trapezium	G1							
2C 2e	Circumference of a circle	G7, G2							
2C 2f	Area of a circle	G7, G2							
1C 2f	Surface area of a cuboid	G1							
1C 2g	Volume of a cuboid	G1							
Year One	Autumn term	2				3 Expressions and formulae (Algebra)	1C 3a	Using letter symbols	A2
			1C 3b	Collecting like terms	A4, A3				
			2C 3a	Indices in algebra	A1, A2				
			1C 3c	Expanding brackets	A4				
			2C 3e	Factorising expressions	A4, A3				
			1C 3d	Using a formula	A5				
			1C 3e	Writing a formula	A6, DF3				
			1C 3f	Further substitution	A2				
			1C 3g	Further simplification	A4				
			1C 3h	Simplification and division	A4				
Case study	1C CS1	Dairy farm	RM1, SP4						
Year One	Autumn term	2	4 Fractions, decimals and percentages (Number)	1C 4a	Fraction notation	R3			
				1C 4b	Adding and subtracting fractions	N4			
				2C 4c	Multiplying and dividing fractions	N4			
				1C 4c	Decimals and fractions	N9			
				1C 4d	Fraction of a quantity	N11			
				1C 4e	Percentages	N10, R8			
				2C 4e	Percentage problems	R8			
			1C 4f	Fractions, decimals and percentages	N10, DF5				
			Assessment	1C	MyAssessment 1				
			Year One	Autumn term	2	5 Angles and 2D shapes (Geometry and measures)	1C 5a	Calculating angles	G10, G7
1C 5b	Angles and parallel lines	G11							
1C 5c	Angles in triangles and quadrilaterals	G7							
1C 5d	Properties of triangles	G7, DF7							
1C 5e	Properties of quadrilaterals	G7, DF7							
1C 5f	Properties of polygons	G7, G5							
2C 5d	Congruent shapes	G13, G9							
6 Graphs (Algebra)	1C 6a	Coordinates				A8			
	1C 6b	Plotting horizontal and vertical lines				A9			
	1C 6c	Plotting straight-line graphs				A9			
1C 6d	The equation of a straight line	A9, A10							
1C 6e	Real-life graphs	A13							
1C 6f	Line graphs for time series	S2							
2C 6c	Curved graphs	A9							
Case study	1C CS2	Recycling and energy	RM2, DF2						
Year One	Spring term	3	7 Whole number calculations (Number)	1C 7a	Rounding	N13			
				1C 7b	Order of operations	N5, N15, A2			
				1C 7c	Mental methods of multiplication and division	N4			
				1C 7d	Written methods of multiplication	N4			
				1C 7e	Written methods of division	N4, N14			
				1C 7f	Calculator methods 2	N15			
				2C 8a	Planning a statistical investigation	RM7			
			8 Statistics (Statistics and probability)	1C 8a	Types of data and averages	S1			
				1C 8b	The mean	S1			
				1C 8c	Frequency tables	S2, S1			
1C 8d	Bar charts	S2							
1C 8e	Pie charts	S2							
1C 8f	Collecting data								
1C 8g	Designing a questionnaire								
1C 8h	Grouping data	S2, S1							
1C 8i	Comparing data	S1, RM7							
2C 8h	Scatter diagrams and correlation	S3							
Assessment	1C	MyAssessment 2							
9 Transformations and symmetry (Geometry and measures)	1C 9a	Reflection	G8						
	1C 9b	Rotation	G8						
	1C 9c	Symmetry	G5						
	1C 9d	Translation	G8						

Year	Term	Year One	Spring	4	Geometry and measures	1C	9e	Enlargement	G9			
					1C	9f	Tessellations	G8				
					Case study	1C	CS3	Rangoli	RM5			
				4	10 Equations (Algebra)	1C	10a	Solving equations	A7, N6			
						1C	10b	Unknowns on both sides	A7			
						1C	10c	Further equations	A7			
						2C	10c	Equations with fractions	A7, A10			
						1C	10d	Constructing equations	A6, DF3, SP3			
					11 Factors and multiples (Number)	1C	11a	Squares and square roots	N7, N15			
						2C	1d	Square roots and cube roots	N7			
						1C	11b	Factors and multiples	N3			
						1C	11c	Prime factors	N3			
						1C	11d	Divisibility tests	N3			
					12 Constructions and 3D shapes (Geometry and measures)	1C	11e	LCM and HCF using prime factors	N3			
						1C	12a	Constructing bisectors	G4			
						1C	12b	Constructing triangles 1	G9			
						1C	12c	Constructing triangles 2	G9			
						1C	12d	Simple loci	G4			
						1C	12e	Scale drawings	R2, G3			
						1C	12f	2D representations of 3D shapes	DF7, G15			
					1C	12g	Plans and elevations	DF5				
					2C	12f	Bearings	G3, G11				
					Case study	1C	CS4	Labyrinths and mazes	RM5			
					Assessment	1C		MyAssessment 3				
	Summer term	Year One		5	13 Sequences (Algebra)	1C	13a	Sequences	A14			
									1C	13b	Sequence rules	A14
									1C	13c	Sequences and algebra	A1, A14
									1C	13d	Finding a rule from a sequence	A15
									1C	13e	Sequences in context	A15, RM4
							14 Decimal calculations (Number)	1C	14a	Mental methods of multiplying and dividing decimals	N4, DF2	
								1C	14b	Multiplying decimals	N4	
								1C	14c	Dividing decimals	N4	
								1C	14d	Calculator methods 3	N15	
								Case study	1C	CS5	Electricity in the home	SP4, DF2, RM6
							15 Ratio and proportion (Ratio and proportion)	1C	15a	Introducing proportion	N9, N10	
								1C	15b	Direct proportion	R9	
								1C	15c	Ratio	R4, R2	
								1C	15d	Dividing in a given ratio	R5	
								1C	15e	Ratio and proportion	R6, R7	
								1C	15f	Percentage problems	R8	
							16 Probability (Statistics and probability)	1C	16a	The probability scale	P1	
								1C	16b	Equally likely outcomes	P1	
								1C	16c	Mutually exclusive outcomes	P1, P2	
				1C	16d	Experimental probability		P1				
				1C	16e	Comparing probabilities		P1				
				2C	16a	Two or more events		P4				
				1C	16f	Sorting with Venn diagrams		P3				
					Case study	1C	CS6	The school fair	SP2, SP3, RM7			
					Assessment	1C		MyAssessment 4				
				17 Everyday maths (Real life maths)	1C	17a	The swimming gala	DF2, RM2, RM5, SP4				
					1C	17b	The diving pool and ticket sales	DF3, DF4, RM1, SP2				
					1C	17c	Getting ready	DF5, RM2, SP3				
					1C	17d	The swimming competitions	DF2, RM2, SP4				
					1C	17e	The final results	DF5, RM3, SP1				
Year Two	Summer term	Year One		1	1 Whole numbers and decimals (Number)	2C	1f	Rounding and estimation	N13, N14			
						3C	1a	Significant figures	N13, N14			
						3C	1b	Upper and lower bounds 1	N13, N14			
						3C	1c	Upper and lower bounds 2	N14			
						3C	1d	Using numbers in index form	N3, P3, SP4			
						2 Measures, perimeter and area (Geometry and measures)	3C	2a	Measures	R1, N12		
					3C		2c	Dimensions	R1			
					3C		2d	Length and area	G1			
					3C		2e	Compound measures	R10			
					2C		14c	Surface area of a prism	G1			
						3 Expressions and formulae (Algebra)	2C	14d	Volume of a prism	G1		
					3C		3a	Index laws 1	DF3			
					3C		3b	Index laws 2	DF3			
					3C		3c	Multiplying linear expressions	A4			
					3C		3d	Factorising expressions	A4			
					2C		3i	Algebraic fractions	DF3, N4			
					3C		3e	Identities	A3, DF7			
					3C		3f	Formulae	A5, A6			
					3C	3g	Changing the subject of a formula 1	A5, A6				
					3C	3h	Changing the subject of a formula 2	A5, A6				
					Case study	3C	CS1	Why do bikes have gears?	RM5, SP4			

Year Two	Autumn term	2	4 Fractions, decimals and percentages (Number)	3C 4a	Calculating with fractions	N4	
			3C 4b	Recurring decimals and reciprocals	N9, N5, N16		
			3C 4c	Percentage increase and decrease	N10, R8		
			3C 4d	Reverse percentages	R8, SP2		
			3C 4e	Financial maths 1: Repeated percentage change	R8, SP1, SP2		
			2C 4f	Fractions, decimals and percentages	N9, N2, N10		
			Assessment	3C	My Assessment 1		
			5 Angles and 2D shapes (Geometry and measures)	3C 5a	Angle problems	RM4, G11, G12	
				3C 5b	Angles in a polygon	G12	
				3C 5c	Circle properties	G7, G6	
				3C 5d	Arcs and sectors	G2	
				3C 5e	Congruence	G6, G9	
			6 Graphs (Algebra)	3C 6a	The gradient of a straight line	A11, RM3	
				3C 6b	Graphs of linear functions	A9, A11	
				2C 6b	Equation of a straight line	A11, A10	
				2C 6e	Graphs of implicit functions	A9, A12	
				3C 6c	Parallel and perpendicular lines	A11, DF5	
				3C 6d	Quadratic graphs 1	A9, A6, DF6	
				3C 6e	Quadratic graphs 2	A9, A6, DF6	
				3C 6f	Cubic graphs	A13	
				3C 6g	Distance-time graphs	A6, R10	
				3C 6h	Real-life graphs	A6, A13	
				3C 6i	Time series	S2	
			3C 6j	Exponential and reciprocal graphs	A13		
			Case study	3C CS2	Jewellery business	RM1, SP1, SP2	
Year Two	Spring term	3	7 Decimal calculations (Number)	3C 7a	Order of operations	N5, N6, RM4	
			3C 7b	Calculating with decimals	N4		
				3C 7c	Using a calculator	N15	
				2C 11c	Calculator skills	N15, N13, N14	
				3C 7c	Interpreting the calculator display	N15, N14, N12	
			8 Statistics (Statistics and probability)	3C 8a	Planning a statistical survey	RM7	
				3C 8b	Data collection	RM7	
				2C 8c	Frequency tables	S2	
				3C 8d	Constructing diagrams	S2	
				3C 8c	Frequency diagrams	S1, S2	
				3C 8d	Moving averages	S1	
				3C 8e	The mean	S1	
				2C 8e	Averages 1	S1	
				3C 8f	Correlation	S3, RM7	
				3C 8g	Cumulative frequency	S2	
				3C 8h	Interpreting data	S3	
			3C 8i	Comparing distributions	S3		
			3C 8j	Box plots	S1		
			Assessment	3C	MyAssessment 2		
			9 Transformations and scale (Geometry and measures)	3C 9a	Transformations	G8	
				3C 9b	Enlargements 1	G9	
				3C 9c	Enlargements 2	G9	
				3C 9d	Maps and scale drawings	R2, G3	
				3C 9e	Similar shapes	R2, RM2	
			Case study	3C CS3	Climate change	DF7, RM7	
		4	10 Equations (Algebra)	3C 10a	Consolidating linear equations	A7, DF4	
					3C 10b	Simultaneous equations 1	DF2, SP3
					3C 10c	Simultaneous equations 2	DF2, SP3
					3C 10d	Constructing simultaneous equations	A6
					3C 10e	Solving simultaneous equations with graphs	A12, A10
					3C 10f	Solving inequalities	N2, A3, A7
					3C 10g	Solving equations using trial-and-improvement	A2
			11 Powers and roots (Number)	2C 7b	Powers of 10	N1, N8	
				3C 11a	Standard form for large numbers	N8	
				3C 11b	Standard form for small numbers	N8, N15	
				3C 11c	Powers and operations	A1, N5	
				2C 1g	Trial and improvement1		
			3C 11d	Indices and surds	N7		
			12 Constructions and Pythagoras (Geometry and measures)	3C 12a	Pythagoras' theorem	G14	
				3C 12b	Applications of Pythagoras' theorem	G14	
				2C 12b	Constructing triangles 2	G9	
				3C 12c	Constructing a triangle	G9	
				2C 12c	Bisectors and perpendiculars	G4	
				3C 12d	Loci	G6, G9	
			2C 12d	Scale drawings	R2, G3		
			Case study	3C CS4	Garden design	RM5, DF5	
			Assessment	3C	MyAssessment 3		
		4	13 Sequences (Algebra)	3C 13a	Position-to-term rules	A14, A15	
					3C 13b	Patterns and sequences	A16
					3C 13c	Quadratic sequences	A14, DF2
					2C 13c	Geometric sequences	A16

Year Two	Summer term	5	(Algebra)	2C	13d	Recursive sequences	A16
				3C	13d	Behaviour of a sequence	A16, A6
			14 3D shapes and trigonometry	3C	14a	3D shapes	DF7
				3C	14b	3D Geometry	G1, G14
				3C	14c	Trigonometry 1	G14
				3C	14d	Trigonometry 2	G14
				3C	14e	Bearings	G3, G14
			Case study	3C	CS5	Golden rectangle	RM4, RM5, SP3
			15 Ratio and proportion	3C	15a	Fractions and proportion	R6, N11
				2C	15a	Ratio	R4
				3C	15b	Ratio and proportion	R4, R5, R6, R7
				3C	15c	Proportionality	R9
				3C	15d	Proportion and scale	R2, G3
				3C	15e	Proportional reasoning	R7, RM6
				2C	15e	Comparing proportions	N10
		2C		15f	Algebra and proportion	R9, A13, RM2	
			3C	15f	Financial maths 2: Living on a budget	SP3	
		6	16 Probability	3C	16a	Prediction and uncertainty	RM7
				3C	16b	Independent events	P1, RM7
				3C	16c	Tree diagrams	P4
				2C	16c	Mutually exclusive outcomes	P4, P2
				3C	16d	Probability of combined events	P4
				3C	16e	Experimental probability	P1, P2
				2C	16e	Comparing experimental and theoretical probability	P1, RM7
				3C	16f	Simulations	P4
			2C	16g	Venn diagrams and probability	P3	
			3C	16g	Venn diagrams	P3	
			Case study	3C	CS6	Crime scene investigation	DF4, DF6
			Assessment	3C		MyAssessment 4	
			17 Everyday maths	3C	17a	The AfriLinks project	SP3, SP4
3C	17b			Building the schoolhouse	DF2, SP1, SP3, SP4		
3C	17c			Laying the path	RM5, SP1, SP3, SP4		
3C	17d	The basketball court		SP3, SP4			
3C	17e	The school garden		RM1, SP1, SP3, SP4			
(Number)							
(Ratio and proportion)							
(Statistics and probability)							
(Real life maths)							