

Mathematics – Year 8

	Topic	Mathswatch Clip	Resources
Term 1 & 2	8.6 Numbers and the number system Multiples, factors, primes	N10, N11, N30	https://www.piximaths.co.uk/types-of-numbers
	8.7 Counting and comparing Negative numbers Multiply and divide by 10, 100 and 1000	N18 N17a	https://www.piximaths.co.uk/negative-numbers https://www.piximaths.co.uk/four-operations
	8.8 Calculating Addition & subtraction Multiplication & division	N13a and b N15a and b	https://www.piximaths.co.uk/four-operations https://www.piximaths.co.uk/four-operations
	8.9 Exploring and calculating fractions, decimals and percentages Equivalent fraction and simplifying fractions Convert fractions, decimals and percentages Convert fractions from improper to mixed numbers Find fraction of an amount	N23 N32 N35 N33 N24b N36 N37a	https://www.piximaths.co.uk/fdp-equivalence https://www.piximaths.co.uk/fdp-equivalence https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/percentages https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/fractions

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Topic	Mathswatch Clip	Resources
Find percentage of an amount Add & subtract fractions with common denominator Multiply fractions by whole numbers		
8.10 Checking, approximating and estimating Rounding to nearest 10, 100, 1000, 10 000, 100 000 Round decimals Ratio and proportion	N27a N27b R1a and b	https://www.piximaths.co.uk/rounding-and-estimating https://www.piximaths.co.uk/rounding-and-estimating https://www.piximaths.co.uk/simplifying-ratio https://www.piximaths.co.uk/dividing-into-a-ratio
8.11 Investigating properties of shapes 3D shapes, symmetry	G12a, b and c G3 and G7	https://www.piximaths.co.uk/types-of-shapes-2D-and-3D https://www.piximaths.co.uk/reflection-and-symmetry
8.12 Measuring and calculating space Convert mm, cm, km Perimeter and area Volume of cuboids	R2 G8b, G20a G21a G4a	https://www.piximaths.co.uk/time-calculations https://www.piximaths.co.uk/area-and-perimeter-using-formulae https://www.piximaths.co.uk/cubes-and-cuboids

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Topic	Mathswatch Clip	Resources
Reflections Translations	G5	https://www.piximaths.co.uk/reflection-and-symmetry https://www.piximaths.co.uk/translations
8.13 Investigating angles Types of angles Draw and measure angles Reading scales	G10a G10b and c N8	https://www.piximaths.co.uk/types-of-lines-and-angles https://www.piximaths.co.uk/types-of-lines-and-angles https://www.piximaths.co.uk/reading-and-interpreting-scales
8.14 Exploring time Time Timetables	N7B N21b	https://www.piximaths.co.uk/time-calculations https://www.piximaths.co.uk/time-calculations
8.15 Presentation of data Averages Pie charts Bar charts	S7 S9 S2a and b	https://www.piximaths.co.uk/averages-mode-median-mean-range https://www.piximaths.co.uk/bar-charts
8.16 Probability Probability events Probability scales	P1, P2 P5	https://www.piximaths.co.uk/introduction-to-probability https://www.piximaths.co.uk/introduction-to-probability

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	Topic	Mathswatch Clip	Resources
	8.17 Algebra	A1a	https://www.piximaths.co.uk/coordinates
	Coordinates	N26	https://www.piximaths.co.uk/function-machines
	Function machines		
Term 3 & 4	8.18 Numbers and the number system	N10, N11, N30a	https://www.piximaths.co.uk/types-of-numbers
	Multiples, factors and primes	N17a	https://www.piximaths.co.uk/four-operations
	Multiply and divide numbers by 10, 100 and 1000	N18	https://www.piximaths.co.uk/directed-(negative)-numbers
	Negative numbers		
	8.19 Checking, approximating and estimating	N27a	https://www.piximaths.co.uk/rounding-and-estimating
		N27b	
	Rounding to nearest 10, 100, 1000, 10 000, 100 000	N43a and b	https://www.piximaths.co.uk/rounding-and-estimating
	Rounding to decimal places		https://www.piximaths.co.uk/rounding-and-estimating
	Estimation		
	8.20 Calculating:	N13a and b	https://www.piximaths.co.uk/four-operations
	Addition and subtraction	N15a and b	https://www.piximaths.co.uk/four-operations
	Multiplication and division	N29a	https://www.piximaths.co.uk/four-operations

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Topic	Mathswatch Clip	Resources
Addition & subtraction Multiplication & division Long division Order of operations	N20	https://www.piximaths.co.uk/order-of-operations
8.21 Exploring and calculating fractions, decimals and percentages Equivalent fraction Adding and subtracting fractions Multiply fractions Divide fractions Percentage of amounts	N23a and b N36 N42a N42b N24b	https://www.piximaths.co.uk/fdp-equivalencies https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/percentages
8.22 Algebraic proficiency: using formulae Use simple formulae Convert between miles and kilometres	A3 R2	https://www.piximaths.co.uk/worded-formulae https://www.piximaths.co.uk/metric-unit-conversions
8.23 Solving equations and inequalities Linear equations	A17	https://www.piximaths.co.uk/solving-linear-equations

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Topic	Mathswatch Clip	Resources
8.24 Investigating properties of shapes 3D shapes Angles in polygons Parts of circles	G12a, b and c G19 G2	https://www.piximaths.co.uk/types-of-shapes-2D-and-3D https://www.piximaths.co.uk/interior-and-exterior-angles https://www.piximaths.co.uk/properties-of-circles
8.25 Investigating angles Draw and measure angles Vertically opposite angles	G10a, b and c G18	https://www.piximaths.co.uk/types-of-lines-and-angles https://www.piximaths.co.uk/angles-in-parallel-line
8.26 Proportional reasoning Ratio and proportion	R1a and b R5a and b	https://www.piximaths.co.uk/simplifying-ratio https://www.piximaths.co.uk/dividing-into-a-ratio
8.27 Sequences/patterns Linear sequences	A11a, b and c	https://www.piximaths.co.uk/nth-term,-first-term,-sequences
8.28 Measuring and calculating space Convert metric units Area of parallelograms Area of triangles	N7a, b and c G20b G20c	https://www.piximaths.co.uk/metric-unit-conversions https://www.piximaths.co.uk/area-and-perimeter-using-formulae https://www.piximaths.co.uk/area-and-perimeter-using-formulae

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	Topic	Mathswatch Clip	Resources
	8.29 Mathematical movement Coordinates Translations Reflections	A1a and b G5 G4a and b	https://www.piximaths.co.uk/coordinates https://www.piximaths.co.uk/translations https://www.piximaths.co.uk/reflections-and-symmetry
	8.30 Presentation and measuring data Bar charts Pie charts Averages	S2a and b S9 S7, S10a and b	https://www.piximaths.co.uk/bar-charts https://www.piximaths.co.uk/pie-charts https://www.piximaths.co.uk/averages
Term 5 & 6	8.31 Numbers and the number system Multiples, factors and primes Highest common factor Lowest common multiple Roots and powers	N10, N11, N30 N31a N31b N25	https://www.piximaths.co.uk/types-of-numbers https://www.piximaths.co.uk/products-of-prime-factors-hcf-and-l https://www.piximaths.co.uk/products-of-prime-factors-hcf-and-l https://www.piximaths.co.uk/types-of-numbers
	8.32 Calculating: Long multiplication and long division	N28a and b N29a and b N20	https://www.piximaths.co.uk/four-operations https://www.piximaths.co.uk/four-operations

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Topic	Mathswatch Clip	Resources
Order of operations		https://www.piximaths.co.uk/order-of-operations
8.33 Checking, approximating and estimating significant figures Estimations	N38 N43a and b	https://www.piximaths.co.uk/rounding-and-estimating https://www.piximaths.co.uk/rounding-and-estimating
8.34 Counting and comparing Negative numbers	N38 N43a and b	https://www.piximaths.co.uk/rounding-and-estimating https://www.piximaths.co.uk/rounding-and-estimating
8.34 Counting and comparing Negative numbers	N18	https://www.piximaths.co.uk/directed-(negative)-numbers
8.35 Exploring and calculating fractions, decimals and percentages Adding and subtracting fractions Multiply and divide Percentage increase/decrease	N36 N42a and b R9a and b	https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/fractions https://www.piximaths.co.uk/percentages

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Topic	Mathswatch Clip	Resources
8.36 Algebraic proficiency: using formulae	A8 and A16	https://www.piximaths.co.uk/expanding-brackets
Expanding brackets – single and double	A6	https://www.piximaths.co.uk/simplifying-and-substituting
Collecting like terms	N26	https://www.piximaths.co.uk/function-machines
Function machines	A10	https://www.piximaths.co.uk/simplifying-and-substituting
Substitution		
8.37 Solving equations and inequalities	A12	https://www.piximaths.co.uk/solving-linear-equations
Solve linear equations		
8.38 Investigating properties of shapes	G14 and G16	https://www.piximaths.co.uk/types-of-shapes-2d-3d
Properties of shapes	G30	https://www.piximaths.co.uk/pythagoras'-Theorem
Pythagoras Theorem		
8.39 Investigating angles	G10b and c	https://www.piximaths.co.uk/types-of-lines-and-angles
Draw and measure angles	G18	https://www.piximaths.co.uk/angles-in-parallel-lines
Vertically opposite angles		
8.40 Proportional reasoning	R1a and b	https://www.piximaths.co.uk/simplifying-ratio
Ratio and proportion	R5a and b	https://www.piximaths.co.uk/dividing-into-a-ratio

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Topic	Mathswatch Clip	Resources
8.41 Sequences/patterns Generate terms of a sequence from a term-to-term rule	A11a, b and c	https://www.piximaths.co.uk/nth-term
8.42 Measuring and calculating space Convert units of metric measures, Perimeters and area Surface area and volume of cuboids	R2 G8b and G20a G21a and b	https://www.piximaths.co.uk/metric-unit-conversions https://www.piximaths.co.uk/area-and-perimeter-using-formulae https://www.piximaths.co.uk/cubes-and-cuboids
8.43 Mathematical movement Coordinates Plotting straight lines Translation Reflection Rotations	A1b A14a and b G5 G4a G6	https://www.piximaths.co.uk/coordinates https://www.piximaths.co.uk/linear-graphs https://www.piximaths.co.uk/translations https://www.piximaths.co.uk/reflections-and-symmetry https://www.piximaths.co.uk/rotations-and-symmetry
8.44 Presentation and measuring data Bar charts	S2a and b S9 S3	https://www.piximaths.co.uk/bar-charts https://www.piximaths.co.uk/pie-charts https://www.piximaths.co.uk/tally-charts

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Pie charts	S1a and b	https://www.piximaths.co.uk/pictograms
Frequency tables	S7	https://www.piximaths.co.uk/averages-mode-median-mean-range
Pictograms		
Averages, mean, mode, median		