

Time	Topic	What students should know	Mathswatch links for revision
3	1.1 Calculations	<ul style="list-style-type: none"> • Use priority of operations with positive and negative numbers. • Simplify calculations by cancelling. • Use inverse operations. 	<ul style="list-style-type: none"> • 21 - Inverse operations • 75 - BODMAS/BIDMAS
3	1.2 Decimal numbers	<ul style="list-style-type: none"> • Round to a given number of decimal places. • Multiply and divide decimal numbers. 	<ul style="list-style-type: none"> • 32 - Rounding to Decimal Places • 66/67 - Multiplying and Dividing Decimals • 19 - Multiplying Integers • 20 - Dividing Integers
3	1.3 Place value	<ul style="list-style-type: none"> • Write decimal numbers of millions. • Round to a given number of significant figures. • Estimate answers to calculations. • Use one calculation to find the answer to another. 	<ul style="list-style-type: none"> • 1 - Place Value • 91 - Estimating Answers • 92 - Using Place Value
3	1.4 Factors and multiples	<ul style="list-style-type: none"> • Recognise 2-digit prime numbers. • Find factors and multiples of numbers. • Find common factors and common multiples of two numbers. • Find the HCF and LCM of two numbers by listing. 	<ul style="list-style-type: none"> • 28 - Factors, Multiples and Primes
2	1.5 Squares, cubes and roots	<ul style="list-style-type: none"> • Find square roots and cube roots. • Recognise powers of 2, 3, 4 and 5. 	<ul style="list-style-type: none"> • 81 - Squares, Cubes and Roots
3	1.6 Index notation	<ul style="list-style-type: none"> • Use index notation for powers of 10. • Use index notation in calculations. • Use the laws of indices. 	<ul style="list-style-type: none"> • 82 - Working with Indices • 29 - Introduction To Powers/Indices
3	1.7 Prime factors	<ul style="list-style-type: none"> • Write a number as the product of its prime factors. • Use prime factor decomposition and Venn diagrams to find the HCF and LCM. 	<ul style="list-style-type: none"> • 78 - Product of Primes • 79/80 - HCF and LCM
2	2.1 Algebraic expressions	<ul style="list-style-type: none"> • Use correct algebraic notation. • Write and simplify expressions. 	<ul style="list-style-type: none"> • 7 - Introduction To Algebraic Conventions • 33 - Simplifying - Addition & Subtraction • 34 - Simplifying - Multiplying • 35 - Simplifying - Division
2	2.2 Simplifying expressions	<ul style="list-style-type: none"> • Use the index laws. • Multiply and divide expressions. 	<ul style="list-style-type: none"> • 29 - Introduction To Powers/Indices • 82 - Working With Indices • 131 - Index Notation
2	2.5 Expanding brackets	<ul style="list-style-type: none"> • Expand brackets. • Simplify expressions with brackets. 	<ul style="list-style-type: none"> • 93 - Expanding Brackets

2	3.1 Frequency tables	<ul style="list-style-type: none"> • Designing tables and data collection sheets. • Reading data from tables. 	• 65 - Frequency Tables & Diagrams
2	3.2 Two-way tables	<ul style="list-style-type: none"> • Use data from tables. • Design and use two-way tables. 	• 61 - Two Way Tables
4	3.3 Representing data	<ul style="list-style-type: none"> • Draw and interpret comparative and composite bar charts. • Interpret and compare data shown in bar charts and line graphs. 	• 15 - Tally Charts & Bar Charts
3	3.5 Stem and leaf diagrams	<ul style="list-style-type: none"> • Construct and interpret stem and leaf and back-to-back stem and leaf diagrams. 	
3	3.6 Pie charts	<ul style="list-style-type: none"> • Draw and interpret pie charts. 	• 128 - Pie Charts
2	3.7 Scatter graphs	<ul style="list-style-type: none"> • Plot and interpret scatter graphs. • Determine whether or not there is a relationship between sets of data. 	• 129 - Scatter Diagrams
2	3.8 Line of best fit	<ul style="list-style-type: none"> • Draw a line of best fit on a scatter graph. • Use the line of best fit to predict values. 	• 129 - Scatter Diagrams

4	4.1 Working with fractions	<ul style="list-style-type: none"> • Compare fractions. • Add and subtract fractions. • Use fractions to solve problems. 	<ul style="list-style-type: none"> • 25 - Equivalent Fractions • 26 - Simplifying Fractions • 70 - Comparing Fractions • 71 - Adding & Subtracting Fractions
2	4.2 Operations with fractions	<ul style="list-style-type: none"> • Find a fraction of a quantity or measurement. • Use fractions to solve problems. 	<ul style="list-style-type: none"> • 25 - Equivalent Fractions • 26 - Simplifying Fractions • 72 - Finding A Fraction Of An Amount
3	4.3 Multiplying fractions	<ul style="list-style-type: none"> • Multiply whole numbers, fractions and mixed numbers. • Simplify calculations by cancelling. 	<ul style="list-style-type: none"> • 25 - Equivalent Fractions • 26 - Simplifying Fractions • 72 - Finding A Fraction Of An Amount • 19 - Multiplying Integers • 73 - Multiplying Fractions
2	4.4 Dividing fractions	<ul style="list-style-type: none"> • Divide a whole number by a fraction. • Divide a fraction by a whole number or a fraction. 	<ul style="list-style-type: none"> • 25 - Equivalent Fractions • 26 - Simplifying Fractions • 72 - Finding A Fraction Of An Amount • 19 - Multiplying Integers • 20 - Dividing Integers • 74 - Dividing Fractions
3	4.5 Fractions and decimals	<ul style="list-style-type: none"> • Convert fractions to decimals and vice versa. • Use decimals to find quantities. • Write one number as a fraction of another. 	<ul style="list-style-type: none"> • 84 - Decimals & Fractions • 85 - Fractions, Decimals & Percentages
2	4.6 Fractions and percentages	<ul style="list-style-type: none"> • Convert percentages to fractions and vice versa. • Write one number as a percentage of another. 	<ul style="list-style-type: none"> • 84 - Decimals & Fractions • 85 - Fractions, Decimals & Percentages

3	4.7 Calculating percentages 1	<ul style="list-style-type: none"> • Convert percentages to decimals and vice versa. • Find a percentage of a quantity. • Use percentages to solve problems. 	<ul style="list-style-type: none"> • 84 - Decimals & Fractions • 85 - Fractions, Decimals & Percentages • 86 - Percentage Of An Amount (Calculator) • 87 - Percentage Of An Amount (Non-Calculator) • 111 - Simple Interest
3	4.8 Calculating percentages 2	<ul style="list-style-type: none"> • Calculate percentage increases and decreases. • Use percentages in real-life situations. • Calculate VAT (value added tax). 	<ul style="list-style-type: none"> • 86 - Percentage Of An Amount (Calculator) • 87 - Percentage Of An Amount (Non-Calculator) • 108 - Increase/Decrease By A Percentage
3	5.1 Solving equations 1	<ul style="list-style-type: none"> • Understand and use inverse equations. • Rearrange simple linear equations. • Solve simple linear equations. 	<ul style="list-style-type: none"> • 21 - Inverse Operations • 100 - Solving Equations Using Flowcharts • 101 - Subject Of The Formula Using Flowcharts • 135 - Solving Equations

2	5.2 Solving equations 2	<ul style="list-style-type: none"> • Solve two-step equations. 	<ul style="list-style-type: none"> • 21 - Inverse Operations • 100 - Solving Equations Using Flowcharts • 135 - Solving Equations
3	5.4 Introducing inequalities	<ul style="list-style-type: none"> • Use correct notation to show inclusive and exclusive inequalities. • Solve simple linear inequalities. • Write down whole numbers which satisfy an inequality. • Represent inequalities on a number line. 	<ul style="list-style-type: none"> • 138 - Inequalities On A Number Line • 139 - Solving Inequalities
1	5.7 Generating sequences	<ul style="list-style-type: none"> • Recognise and extend sequences. 	<ul style="list-style-type: none"> • 37 - Generating A Sequence Term To Term • 104 - Special Sequences
2	5.8 Using the nth term of a sequence	<ul style="list-style-type: none"> • Use the nth term to generate terms of a sequence. • Find the nth term of an arithmetic sequence. 	<ul style="list-style-type: none"> • 102 - Generating A Sequence From The nth Term • 103 - Finding The nth Term
2	6.1 Properties of shapes	<ul style="list-style-type: none"> • Solve geometric problems using side and angle properties of quadrilaterals. • Identify congruent shapes. 	<ul style="list-style-type: none"> • 12 - Tessellations & Congruent Shapes • 166 - Congruent Triangles
2	6.2 Angles in parallel lines	<ul style="list-style-type: none"> • Understand and use the angle properties of parallel lines. • Find missing angles using corresponding and alternate angles. 	<ul style="list-style-type: none"> • 120 - Angles & Parallel Lines • 166 - Congruent Triangles
1	6.3 Angles in triangles	<ul style="list-style-type: none"> • Solve angle problems in triangles. • Understand angle proofs about triangles. 	<ul style="list-style-type: none"> • 121 - Angles In A Triangle • 122 - Properties Of Special Triangles

2	6.6 Geometrical patterns	<ul style="list-style-type: none"> • Solve angle problems using equations. • Solve geometrical problems showing reasoning. 	<ul style="list-style-type: none"> • 45 - Angles On A Line & At A Point • 37 - Forming Formulae & Equations • 120 - Angles & Parallel Lines • 166 - Congruent Triangles • 121 - Angles In A Triangle • 122 - Properties Of Special Triangles
3	7.1 Mean and range	<ul style="list-style-type: none"> • Calculate the mean from a list and from a frequency table. • Compare sets of data using the mean and range. 	<ul style="list-style-type: none"> • 62 - Averages & The Range • 130 - Averages From A Table
2	7.2 Mode, median and range	<ul style="list-style-type: none"> • Find the mode, median and range from a stem and leaf diagram. • Identify outliers. 	

3	8.1 Rectangles, parallelograms and triangles	<ul style="list-style-type: none"> • Calculate the perimeter and area of rectangles, parallelograms and triangles. • Estimate lengths, areas and costs. • Calculate a missing length, given the area. 	<ul style="list-style-type: none"> • 52 - Perimeters • 53 - Area Of A Rectangle • 54 - Area Of A Triangle • 55 - Area Of A Parallelogram
3	8.2 Trapezia and changing units	<ul style="list-style-type: none"> • Calculate the area and perimeter of trapezia. • Find the height of a trapezium given its area. 	<ul style="list-style-type: none"> • 56 - Area Of A Trapezium • 142 - Compound Units
2	8.3 Area of compound shapes	<ul style="list-style-type: none"> • Calculate the perimeter and area of shapes made from triangles and rectangles. 	<ul style="list-style-type: none"> • 53 - Area Of A Rectangle • 54 - Area Of A Triangle • 55 - Area Of A Parallelogram • 56 - Area Of A Trapezium
2	8.4 Surface area of 3D solids	<ul style="list-style-type: none"> • Calculate the surface area of a cuboid. • Calculate the surface area of a prism. 	<ul style="list-style-type: none"> • 114 - Surface Area Of A Prism
2	8.5 Volume of prisms	<ul style="list-style-type: none"> • Calculate the volume of a cuboid. • Calculate the volume of a prism. 	<ul style="list-style-type: none"> • 115 - Volume Of A Cuboid • 119 - Volume Of A Prism
2	8.6 More volume and surface area	<ul style="list-style-type: none"> • Solve problems involving surface area and volume. 	<ul style="list-style-type: none"> • 115 - Volume Of A Cuboid • 119 - Volume Of A Prism • 114 - Surface Area Of A Prism

Half Term	Targetted Intervention Topics	Targetted Intervention Topics	Targetted Intervention Topics
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