

Year 5: Maths Curriculum Overview

Please note that not all schemes of work are currently available. PlanBee is working hard to complete the remaining schemes as quickly as possible.



	Autumn Term	Spring Term	Summer Term
Week 1	A Million Numbers	Exploring Decimals	Positive and Negative Numbers
Week 2	What's the Total?	Calculating Decimals	Mental and Written Addition
Week 3	What's the Difference?	Investigating Shapes	Mental and Written Subtraction
Week 4	Measuring Shapes	Decimals and Fractions	Symmetry, Reflection and Coordinates
Week 5	Fractions and Proportion	Let's Calculate	Factors and Multiples
Week 6	Methods for Multiplying and Dividing	Converting Measures	Percentage and Proportion
Week 7	Angles and Triangles	Graphs and Diagrams	Primes, Squares and Cubes
Week 8	Changing Time	Subtraction Methods	Formal Multiplication
Week 9	Squares, Cubes and Factors	Solving Multiplication and Division	Short Division
Week 10	Length, Weight and Capacity	Calendars, Timetables and Calculators	Describing Data

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	Autumn Term	Spring Term	Summer Term
Week 1	<p>A Million Numbers</p> <ul style="list-style-type: none"> read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 solve number problems and practical problems that involve all of the above read Roman numerals to 1000 (M) and recognise years written in Roman numerals 	<p>Exploring Decimals</p> <ul style="list-style-type: none"> read and write decimal numbers as fractions round decimals with two decimal places to the nearest whole number and to one decimal place read, write, order and compare numbers with up to three decimal places solve problems involving number up to three decimal places 	<p>Positive and Negative Numbers</p> <ul style="list-style-type: none"> count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero solve number problems and practical problems that involve all of the above multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
Week 2	<p>What's the Total?</p> <ul style="list-style-type: none"> count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 	<p>Calculating Decimals</p> <ul style="list-style-type: none"> recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents read, write, order and compare numbers with up to three decimal places solve problems involving number up to three decimal places 	<p>Mental and Written Addition</p> <ul style="list-style-type: none"> add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving number up to three decimal places
Week 3	<p>What's the Difference?</p> <ul style="list-style-type: none"> count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy 	<p>Investigating Shapes</p> <ul style="list-style-type: none"> identify 3-D shapes, including cubes and other cuboids, from 2-D representations draw given angles, and measure them in degrees (°) use the properties of rectangles to deduce related facts and find missing lengths and angles distinguish between regular and irregular polygons based on reasoning about equal sides and angles 	<p>Mental and Written Subtraction</p> <ul style="list-style-type: none"> add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving number up to three decimal places
Week 4	<p>Measuring Shapes</p> <ul style="list-style-type: none"> measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes estimate volume and capacity 	<p>Decimals and Fractions</p> <ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths add and subtract fractions with the same denominator and denominators that are multiples of the same number multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams read and write decimal numbers as fractions [for example, 0.71 = $\frac{71}{100}$] 	<p>Symmetry, Reflection and Coordinates</p> <ul style="list-style-type: none"> identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed

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<p>Week 5</p>	<p>Fractions and Proportion</p> <ul style="list-style-type: none"> compare and order fractions whose denominators are all multiples of the same number identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number add and subtract fractions with the same denominator and denominators that are multiples of the same number 	<p>Let's Calculate</p> <ul style="list-style-type: none"> multiply and divide numbers mentally drawing upon known facts solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates 	<p>Factors and Multiples</p> <ul style="list-style-type: none"> identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers multiply and divide numbers mentally drawing upon known facts solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
<p>Week 6</p>	<p>Methods for Multiplying and Dividing</p> <ul style="list-style-type: none"> multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context 	<p>Converting Measures</p> <ul style="list-style-type: none"> convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; millimetre and millimetre; gram and kilogram; litre and millilitre) understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints use all four operations to solve problems involving measure using decimal notation, including scaling 	<p>Percentage and Proportion</p> <ul style="list-style-type: none"> recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25
<p>Week 7</p>	<p>Angles and Triangles</p> <ul style="list-style-type: none"> know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles draw given angles, and measure them in degrees ($^{\circ}$) identify angles at a point and one whole turn (total 360°) identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) identify other multiples of 90° 	<p>Graphs and Diagrams</p> <ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in a line graph 	<p>Primes, Squares and Cubes</p> <ul style="list-style-type: none"> recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes know and use the vocabulary of prime numbers, prime factors and composite (non- prime) numbers establish whether a number up to 100 is prime and recall prime numbers up to 19
<p>Week 8</p>	<p>Changing Time</p> <ul style="list-style-type: none"> solve problems involving converting between units of time complete, read and interpret information in tables, including timetables 	<p>Subtraction Methods</p> <ul style="list-style-type: none"> add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) add and subtract numbers mentally with increasingly large numbers solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why 	<p>Formal Multiplication</p> <ul style="list-style-type: none"> multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers multiply and divide numbers mentally drawing upon known facts
<p>Week 9</p>	<p>Squares, Cubes and Factors</p> <ul style="list-style-type: none"> identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers multiply and divide numbers mentally drawing upon known facts recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes 	<p>Solving Multiplication and Division</p> <ul style="list-style-type: none"> divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates 	<p>Short Division</p> <ul style="list-style-type: none"> multiply and divide numbers mentally drawing upon known facts divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
<p>Week 10</p>	<p>Length, Weight and Capacity</p> <ul style="list-style-type: none"> convert between different units of metric measure (for example, kilometre and metre; centimetre and metre; millimetre and millimetre; gram and kilogram; litre and millilitre) estimate volume and capacity use all four operations to solve problems involving measure using decimal notation, including scaling 	<p>Calendars, Timetables and Calculators</p> <ul style="list-style-type: none"> solve problems involving converting between units of time complete, read and interpret information in tables, including timetables 	<p>Describing Data</p> <ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in a line graph complete, read and interpret information in tables, including timetables