

| Year 5 Maths | | |
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| Term | Summer 2 | |
| | Converting units 2 weeks and consolidation and objectives recovering Percentages (1 week) Negative numbers (2 weeks) Problem solving (1 week) | <ul style="list-style-type: none"> - Convert between metric and imperial - Convert units of time, units of length, Kg and km, Mm and ml - Calculate with timetables - Solve problems involving converting between units of time - Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimals notation including scaling. <ul style="list-style-type: none"> - Percentages as fractions, decimals - Equivalent fractions and decimals and percentages <ul style="list-style-type: none"> - Understand negative numbers - Count through zero in 1s and in multiples - Compare and order negative numbers - Find the difference with negative numbers <ul style="list-style-type: none"> - Solve problems involving x and ÷, including using their knowledge factors multiples, squares and cubes |
| | Summer 1 | |
| | Measurement (3 weeks) Fractions and decimals (2 weeks) Multiplication and division (2 week) | <ul style="list-style-type: none"> - Estimate volume (e.g. using 1cm³ blocks to build cuboids (including cubes)), and capacity (e.g. using water) - Calculate and compare the are of rectangles (including squares) and including using standard units, square centimetres (cm²) and square metres (m²) and estimate the area of irregular shapes - Convert between different units of metric measure (e.g. km, m, cm and m, cm and mm, g and kg, l and ml) - Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints - Measure and calculate the perimeter of composite rectilinear shapes in cms and m <ul style="list-style-type: none"> - 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 - 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 - Compare and order fractions whose denominators are all multiples of the same number - Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those with a <ul style="list-style-type: none"> - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3) - Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equal sign - Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates |
| | Spring 2 | |
| | Fractions (2 week) Multiplication and division (2 week) | <ul style="list-style-type: none"> - 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 (e.g. $\frac{2}{5} + \frac{4}{5} = 6/5 = 1\frac{1}{5}$) - Add and subtract fractions with the same denominator and convert from one form to the other and write mathematical statements ≥ 1 as a mixed number (e.g. $\frac{2}{5} + \frac{4}{5} = 6/5 = 1\frac{1}{5}$) - Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams - Read and write decimal numbers as fractions (e.g. $0.71 = \frac{71}{100}$) - Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents |
| | Spring 1 | |
| | Decimals (2 weeks) Position and direction (2 week) Multiplication and division (3 week) Shape and angles (2 weeks) | <ul style="list-style-type: none"> - Decimals up to 2 places - Equivalent fractions and decimals – tenths and hundredths, equivalent fractions and decimals - Thousandths as fractions and decimals, and on a place value chart - Order and compare up to 3 decimal places <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 - Find and show an understanding of lines of symmetry - Reflection of horizontal and vertical lines <ul style="list-style-type: none"> - Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers - 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 numbers up to 19 - Multiply numbers up to 4 digits by a one- or two-digit number using formal written method, including long multiplication for two-digit numbers - 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 <ul style="list-style-type: none"> - Identify 3-D shapes, including cube and other cuboids, from 2-D representations - Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles - 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/identify. - Angles at a point and one whole turn (total 360°) - Angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) - Other multiples of 90° |
| | Autumn 2 | |
| | Statistics (1 week) Addition and Subtraction (3 weeks) Place Value (4 weeks) | <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 <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 <ul style="list-style-type: none"> - Read, write, order and compare numbers to at least 100000 and determine the value of each digit - Count forwards or backwards in steps of powers of 10 for any given number up to 1000000 - Interpret negative numbers in contexts, count forwards and backwards with positive and negative whole numbers, including through zero - Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000 - Solve number problems and practical problems that involve all of the above - Read roman numerals to 1000(X) recognise years written in Roman numerals |
| Topic | Objectives | |