

Year 5 Term by Term Objectives

	<u>Number and Place Value</u>	<u>Addition and Subtraction</u>	<u>Statistics</u>	<u>Multiplication and Division</u>	<u>Measurement: Area and Perimeter</u>
Autumn	<p>Read, write, order and compare numbers to at least 1000000 and determine the value of each digit.</p> <p>Count forwards or backwards in steps of powers of 10 for any given number up to 1000000.</p> <p>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers including through zero.</p> <p>Round any number up to 1000000 to the nearest 10, 100, 1000, 10000 and 100000.</p> <p>Solve number problems and practical problems that involve all of the above.</p> <p>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</p>	<p>Add and subtract numbers mentally with increasingly large numbers.</p> <p>Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition)</p> <p>Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</p> <p>Solve addition and subtraction multi-step problems in context, deciding which operations and methods to use and why.</p>	<p>Solve comparison, sum and difference problems using information presented in a line graph.</p> <p>Complete, read and interpret information in tables including timetables.</p>	<p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Multiply and divide whole numbers by 10, 100 and 1000.</p> <p>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>Recognise and use square numbers and cube numbers and the notation for squared and cubed.</p> <p>Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.</p> <p>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</p> <p>Establish whether a number up to 100 is prime and recall prime numbers to 19.</p>	<p>Measure and calculate the perimeter of composite rectilinear shapes in cm and m.</p> <p>Calculate and compare the area of rectangles (including squares), and including using standard units, cm², m² estimate the area of irregular shapes.</p>

Spring	<p><u>Multiplication and Division</u></p> <p>Multiply and divide numbers mentally drawing upon known facts.</p> <p>Multiply numbers up to 4 digits by a one or two digit number using a formal written method, including long multiplication for 2-digit numbers.</p> <p>Divide numbers up to 4 digits by a 1digit number using the formal written method of short division and interpret remainders appropriately for the context.</p> <p>Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.</p>	<p><u>Fractions</u></p> <p>Compare and order fractions whose denominators are multiples of the same number.</p> <p>Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.</p> <p>Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements >1 as a mixed number.</p> <p>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</p>	<p><u>Decimals and Percentage</u></p> <p>Read, write, order and compare numbers with up to three decimal places.</p> <p>Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.</p> <p>Round decimals with two decimal places to the nearest whole number and to one decimal place.</p> <p>Solve problems involving number up to three decimal places.</p> <p>Recognise the percent 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.</p> <p>Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $1/5$, $2/5$, $4/5$ and those fractions with a denominator of a multiple of 10 or 25.</p>
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Summer	<p><u>Decimals</u></p> <p>Recognise and write decimal equivalents of any number of tenths and hundredths.</p> <p>Find the effect of dividing a one or two digit number by 10 or 100, identifying the value of the digits in the answers as ones, tenths and hundredths.</p> <p>Solve simple measures and money problems involving fractions and decimals to two decimal places.</p> <p>Convert between units of measure (for example, kilometres to meters).</p>	<p><u>Geometry: Properties of Shape</u></p> <p>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</p> <p>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</p> <p>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</p> <p>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</p> <p>Draw given angles, and measure them in degrees.</p> <p>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°.</p>	<p><u>Geometry: Position and Direction</u></p> <p>Identify, describe and represent the position of shape following a reflection or translation, using the appropriate language and know that the shape has not changed.</p>	<p><u>Measurement: Converting Units</u></p> <p>Convert between different units of metric measure (for example, km and m; cm and m; cm and mm; g and kg; l and ml)</p> <p>Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</p> <p>Solve problems involving converting between units of time.</p>	<p><u>Measurement: Volume</u></p> <p>Estimate volume [for example using 1cm^3 blocks to build cuboids (including cubes)] and capacity [for example, using water]</p> <p>Use all four operations to solve problems involving measure</p>
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