

Key Learning in Mathematics – Year 3

Number – number and place value	Number – addition and subtraction	Number – multiplication and division
<ul style="list-style-type: none"> Count from 0 in multiples of 4, 8, 50 and 100 Count up and down in tenths Read and write numbers up to 1000 in numerals and in words <i>Read and write numbers with one decimal place</i> Identify, represent and estimate numbers using different representations (<i>including the number line</i>) Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) <i>Identify the value of each digit to one decimal place</i> <i>Partition numbers in different ways (e.g. $146 = 100 + 40 + 6$ and $146 = 130 + 16$)</i> Compare and order numbers up to 1000 <i>Compare and order numbers with one decimal place</i> Find 1, 10 or 100 more or less than a given number <i>Round numbers to at least 1000 to the nearest 10 or 100</i> <i>Find the effect of multiplying a one- or two-digit number by 10 and 100, identify the value of the digits in the answer</i> <i>Describe and extend number sequences involving counting on or back in different steps</i> <i>Read Roman numerals from I to XII</i> Solve number problems and practical problems involving these ideas 	<ul style="list-style-type: none"> <i>Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)</i> <i>Select a mental strategy appropriate for the numbers involved in the calculation</i> <i>Understand and use take away and difference for subtraction, deciding on the most efficient method for the numbers involved, irrespective of context</i> <i>Recall/use addition/subtraction facts for 100 (multiples of 5 and 10)</i> <i>Derive and use addition and subtraction facts for 100</i> <i>Derive and use addition and subtraction facts for multiples of 100 totalling 1000</i> Add and subtract numbers mentally, including: <ul style="list-style-type: none"> - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction Estimate the answer to a calculation and use inverse operations to check answers Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction 	<ul style="list-style-type: none"> <i>Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting, written method)</i> <i>Understand that division is the inverse of multiplication and vice versa</i> <i>Understand how multiplication and division statements can be represented using arrays</i> <i>Understand division as sharing and grouping and use each appropriately</i> Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables <i>Derive and use doubles of all numbers to 100 and corresponding halves</i> <i>Derive and use doubles of all multiples of 50 to 500</i> Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods <i>Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy</i> Solve problems, including missing number problems, involving multiplication and division (<i>and interpreting remainders</i>), including positive integer scaling problems and correspondence problems in which n objects are connected to m objects
Number – fractions	Geometry – properties of shapes <ul style="list-style-type: none"> Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them Recognise angles as a property of shape or a description of a turn Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle Identify horizontal and vertical lines and pairs of perpendicular and parallel lines Geometry – position and direction <ul style="list-style-type: none"> Describe positions on a square grid labelled with letters and numbers Statistics <ul style="list-style-type: none"> Use sorting diagrams to compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects Interpret and present data using bar charts, pictograms and tables Solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables 	

