

Maths

Age related expectations Assessment Grid for Maths: Year 3

	Number & Place Value	Addition & Subtraction	Multiplication & Division	Fractions	Measurement	Geometry: Shape Properties	Geometry: Position & Direction	Statistics
Year 3: Emerging	<p>Count in multiples of 4 and 100; find 10 or 100 more or less than a given number</p> <p>Recognise the place value of each digit in a three digit number (hundreds, tens, ones)</p> <p>Compare and order numbers up to 1000</p>	<p>Add and subtract numbers mentally, including: *A three digit number and ones</p> <p>Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction</p>	<p>Recall and use multiplication facts for the multiplication tables: *3 *4 *8</p>	<p>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one digit numbers or quantities by 10</p> <p>Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</p>	<p>Measure the perimeter of simple 2d shapes</p> <p>Uses vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight</p> <p>Estimate and read time with increasing accuracy to the nearest minute</p>	<p>Draw 2d shapes and make 3d shapes using modelling materials</p>		<p>Interpret and present data using bar charts, pictograms and tables</p>
Year 3: Meeting	<p>Read and write numbers up to 1000 in numerals and in words</p> <p>Count in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</p> <p>Identify, represent and estimate numbers using different representations</p> <p>Solve number problems and practical problems involving these ideas</p>	<p>Add and subtract numbers mentally, including: *a three digit number and tens *a three digit number and hundreds</p> <p>Estimate an answer to a calculation and use inverse operations to check answers</p> <p>Solve problems including missing number problems, using number facts, place value, and more complex addition and subtraction</p>	<p>Recall and use multiplication and division facts for the multiplication tables: *3 *4 *8</p> <p>Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two digit times and one digit numbers, using mental and progressing to formal written methods</p> <p>Solve problems including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects</p>	<p>Recognise and use fractions as numbers: unit fractions (numerator of 1) and non-unit fractions with small denominators</p> <p>Recognise and show, using diagrams, equivalent fractions with small denominators</p> <p>Add and subtract fractions with the same denominator within one whole (for example, $5/7 + 1/7 = 6/7$)</p> <p>Compare and order unit fractions with the same denominator</p> <p>Solve problems that involve all of the above</p>	<p>Tell and write the time from an analogue clock, including Roman numerals from I to XII and 12hr and 24hr clocks</p> <p>Record and compare time in terms of seconds, minutes and hours</p> <p>Know the number of seconds in a minute and the number of days in each month, year and leap year</p> <p>Compare duration of events for example to calculate the time taken by particular events or tasks</p> <p>Add and subtract amounts of money to give change, using both £ and p in practical contexts</p> <p>Measure, compare, add and subtract: *lengths (mm/cm/m) *mass (g/kg) *volume/capacity(ml/l)</p>	<p>Recognise 3d shapes in different orientations and describe them</p> <p>Recognise angles as a property of shape or a description of a turn</p> <p>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</p> <p>Identify horizontal and vertical lines and pairs or perpendicular and parallel lines</p>		<p>Solve one and two step problems using information presented in scaled bar charts and pictograms and tables</p>
Year 3: Advancing	<p>Recognise the value of each digit in a four digit number and the value of a tenth</p> <p>Understand about negative numbers recognising they are smaller than zero</p>	<p>Add and subtract numbers with any number of digits using formal written methods</p>	<p>Solve problems as above including calculations with remainders</p> <p>Know all multiplication and related division facts up to 10×10 and be able to instantaneously answer questions worded in other ways such as how many 7s in 42?</p>	<p>To apply knowledge of the above to find fractional values (from $\frac{1}{2}$ to $\frac{1}{10}$) of larger numbers</p>	<p>Solve practical problems using measures as above</p> <p>Use knowledge of number to solve problems related to money, time and measures linked to school life</p> <p>Can relate knowledge of time to problems related to timetables</p>	<p>To use a protractor to measure angles</p> <p>Know that the internal angles of a triangle measure 180°</p> <p>Estimate and measure angles in the school environment</p>		<p>Apply the skills above to other areas of the curriculum</p>