

## KS1 and KS2 Mental Maths (Fluency) Progression

Using the National Curriculum, these skills have been compiled to highlight the expectations and support the teaching of mental maths. Mental maths is taught for 10 minutes at the beginning of EVERY lesson, creating sequential links to prior learning where appropriate.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Number and Place Value</b>	<ul style="list-style-type: none"> <li>Count to and across 100, forwards and backwards (starting from 0, 1, or any given number)</li> <li>Count in multiples of 2, 5 and 10</li> <li>Find one more or less than a given number</li> <li>Read and write numbers 1-20 in numerals and words</li> </ul>	<ul style="list-style-type: none"> <li>Count in steps of 2, 3 and 5 from any given number, forwards and backwards</li> <li>Count in 10s from any given number, forwards and backwards</li> <li>Read and write numbers to at least 100 in numerals and words</li> </ul>	<ul style="list-style-type: none"> <li>Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number</li> <li>Read and write numbers to a 1000 in numerals and words</li> </ul>	<ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 9, 25 and 1000</li> <li>Find 1000 more or less than a given number</li> <li>Count backwards through zero to include negative numbers</li> <li>Round any number to the nearest 10, 100 or 1000</li> <li>Read Roman numerals to 100 (I to C)</li> </ul>	<ul style="list-style-type: none"> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000</li> <li>Count forwards and backwards with positive and negative whole numbers, including through zero</li> <li>Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000</li> <li>Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.</li> </ul>	<ul style="list-style-type: none"> <li>Round any whole numbers to a required degree of accuracy</li> </ul>

<b>Addition and Subtraction</b>	<ul style="list-style-type: none"> <li>• Represent and use number bonds and related subtraction facts within 20 (<math>13 + 7 = 20</math> <math>7 + 13 = 20</math> <math>20 - 13 = 7</math>)</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use addition and subtraction facts to 20 fluently</li> <li>• Add and subtract numbers mentally including:               <ul style="list-style-type: none"> <li>◦ a two-digit number and ones</li> <li>◦ a two-digit number and tens</li> <li>◦ two two-digit numbers</li> <li>◦ adding three one-digit numbers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally, including:               <ul style="list-style-type: none"> <li>◦ a three-digit number and ones</li> <li>◦ a three-digit number and tens</li> <li>◦ a three-digit number and hundreds</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Continue to build on Add and subtract numbers mentally, including:               <ul style="list-style-type: none"> <li>◦ a three-digit number and ones</li> <li>◦ a three-digit number and tens</li> <li>◦ a three-digit number and hundreds</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Perform mental calculations including mixed operations and large numbers</li> </ul>
<b>Multiplication and Division</b>	<ul style="list-style-type: none"> <li>• Count in 2s, 5s and 10s</li> <li>• Doubling and halving</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables (including recognising odd and even numbers)</li> </ul>	<ul style="list-style-type: none"> <li>• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables</li> </ul>	<ul style="list-style-type: none"> <li>• Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>• Recognise and use factor pairs in mental calculations</li> </ul>	<ul style="list-style-type: none"> <li>• Identify multiples and factors including:               <ul style="list-style-type: none"> <li>◦ finding all factor pairs of a number,</li> <li>◦ common factors of two numbers</li> </ul> </li> <li>• Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</li> <li>• Establish whether a number up to 100 is prime and recall prime numbers up to 19</li> </ul>	<ul style="list-style-type: none"> <li>• Perform mental calculations including mixed operations and large numbers</li> <li>• Identify common factors, common multiples and prime numbers</li> </ul>