

## Mental Maths / Maths fluency

Below is a list of some of the mental maths that we work on in each year group. For a child to be meeting age related expectations they need to be achieving most of the objectives listed for their year group. With a lot of the skills (like times tables and number bonds) they need time to practise regularly. There are links to websites or APPs below. Your child could use these at home to help them with their maths learning and to aid rapid recall. You can also bring many of these maths skills into everyday life e.g. when climbing stairs, singing rhymes, cooking, shopping etc. You could make times table or number bond pairs games with your child to help them recall the facts.

(At home you could help by supporting your child with the things highlighted in blue)

	Addition and Subtraction	Counting	Multiplication and Division
<b>R</b>	<ul style="list-style-type: none"> <li>*Have a deep understanding of number to 10, including the composition of each number; (e.g <math>9 = 5+4</math> <math>7 = 4+3</math>)</li> <li>*Automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</li> </ul>	<ul style="list-style-type: none"> <li>*Verbally count beyond 20, recognising the pattern of the counting system</li> <li>*Explore and represent patterns within numbers up to 10, including evens and odds,</li> </ul>	<ul style="list-style-type: none"> <li>* explore double facts and how quantities can be distributed equally.</li> </ul>
<b>1</b>	<ul style="list-style-type: none"> <li>*Develop fluency in addition and subtraction facts within 10 (<math>5 + 2 = 7</math> <math>9 - 7 = 2</math>)</li> <li>*quickly add or subtract 1 or 2 from a number up to 20 (<math>19 - 2 =</math> )</li> <li>*recall most pairs of numbers that total 10 (<math>6 + 4</math>) (<math>7 + 3</math>) (<math>9+1</math>)</li> <li>*begin to know subtraction facts for bonds to 10 (<math>10 - 7 = 3</math> <math>10 - 5 = 5</math>)</li> </ul>	<ul style="list-style-type: none"> <li>* Count forwards and backwards in multiples of 2, 5 and 10 (beginning with any multiple and counting on up to 10 multiples)</li> <li>* count forwards and backwards through odd numbers</li> <li>*odd and even numbers to 20</li> </ul>	<ul style="list-style-type: none"> <li>*doubles up to double 10</li> <li>*halves of numbers to 20</li> </ul>
<b>2</b>	<ul style="list-style-type: none"> <li>*Secure fluency in addition and subtraction facts with 10 (<math>3 + 4 = 7</math> <math>6 + 2 = 8</math> <math>8 - 5 = 3</math>)</li> <li>*recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 (<math>18 + 2 = 20</math> <math>80 + 20 = 100</math>)</li> <li>*mentally add/ subtract multiples of 10 (e.g. <math>43 + 20</math>)</li> <li>*mentally subtract ones from a 2 digit number (not crossing a ten)</li> <li>*all pairs of multiples of 10 that total 100</li> <li>*what must be added to any 2 digit number to make the next 10 e.g. <math>78 + ? = 80</math></li> <li>* adding 9 and 11 by adjusting</li> </ul>	<ul style="list-style-type: none"> <li>* count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward</li> </ul>	<ul style="list-style-type: none"> <li>* multiplication facts for the 10, 5 and 2 times tables</li> <li>* division facts for the 10, 2 and 5 times tables</li> <li>*near doubles up to double 10 (eg <math>7 + 8</math>)</li> <li>*begin to double 2 digit numbers (partitioning)</li> </ul>
<b>3</b>	<ul style="list-style-type: none"> <li>* Secure fluency in addition and subtraction facts that bridge 10</li> <li>*mentally add 2 numbers (using partitioning and jottings)</li> <li>* add or subtract on 10's, 1's or 100's to a 3 digit number</li> <li>* add and subtract multiples of 10</li> </ul>	<ul style="list-style-type: none"> <li>*count from 0 in multiples of 4, 8 ,50 and 100</li> <li>*count up and down in tenths</li> </ul>	<ul style="list-style-type: none"> <li>*multiplication facts for the 3, 4 and 8 times tables</li> <li>*division facts for the 3 ,4 and 8 times tables</li> <li>*to multiply and divide whole numbers by 10 or 100</li> <li>*to divide 2 digit numbers by 10 or 100</li> <li>*double multiples of 10 and 5 up to 100</li> <li>* to confidently double 2 digit numbers (also near doubles)</li> <li>*starting to look at factors and multiples</li> <li>*to be able to divide 100 in to 2,4,5 and 10 equal parts</li> </ul>

4	<p>*multiples of 10 or 100 that total 1000</p> <p>* mentally add 2 and 3 digit numbers (using partitioning, jottings and rounding)</p> <p>*what must be added to any 3 digit number to make the next 100 e.g. <math>782 + ? = 800</math></p> <p><u>Rounding</u></p> <p>*to round to the nearest 10, 100, 1000, 1/10, 1/100</p>	<p><b>*count in multiples of 6, 7, 9, 25 and 1000</b></p> <p>* count backwards through 0 to include negative numbers</p>	<p><b>*recall multiplication and division facts up to <math>12 \times 12</math></b></p> <p><b>* multiplication facts for the 6, 7, 9, 11, 12 times tables</b></p> <p><b>*division facts for the 6, 7, 9, 11, 12 times tables</b></p> <p>*multiply and divide by 0 and 1</p> <p>*to be able to divide 1000 in to 2,4,5 and 10 equal parts</p> <p><b>* doubles of 2 digit numbers up to 100</b></p> <p>*to know factor pairs for multiplication facts</p>
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### Websites

- <https://www.topmarks.co.uk/maths-games/hit-the-button>
- <https://www.mathletics.com/uk/> (live mathletics is very helpful for recall of number facts)
- <https://www.ictgames.com/mobilePage/index.html>

### APPs

- times table assistant
- 1 minute maths (White Rose)
- Hit the button