
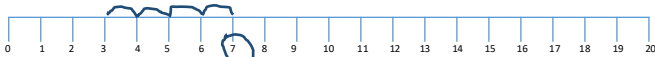
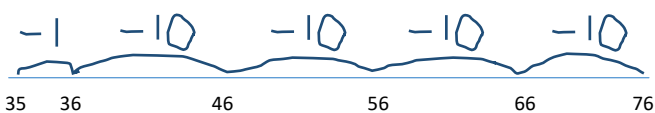


Subtraction: Written Calculations

EYFS:	Objectives (by end of year)
<p>Children will engage in a wide variety of songs and rhymes, games and practical activities.</p> <p>In practical activities and through discussion they will begin to use the vocabulary associated with subtraction.</p> <p>They will find one less than a given number. They will begin to relate subtraction to 'taking away' using objects to count 'how many are left' after some have been taken away. E.g. 'Take two stars away. How many are left?'</p> <div style="text-align: center;">  </div> <p>Children will begin to count back from a given number.</p>	<p>Using quantities and objects, subtract two single digit numbers and count back to find the answer.</p>
Year 1: Number line	
<p>Start with a numbered number line before progressing to an empty number line. $7 - 4 = 3$</p>  <p>Use of 10 and 20 frames</p> <p>$15 - 4 = \square$ $9 - \square = 5$ $\square - \square = 6$ $\square = 6 - 4$</p>	<p>Subtract one-digit and two-digit numbers to 20, including zero.</p> <p>Represent and use number bonds and related subtraction facts within 20.</p> <p>Interpret addition number sentences and solve missing box problems, using concrete objects and pictorial representations.</p>
Year 2: Empty number line used to count back in multiples of 10 and 1	
<p>$76 - 41 = 35$</p>  <p>Move towards more efficient jumps back (e.g. $-40 - 1$)</p> <p>Partitioning: $76 - 41$ $76 - 40 = 36$ $36 - 1 = 35$ (keeping first number whole)</p> <p>By end of Y2, moving to the partitioned column method (only provide examples that do not cross the 10's boundary):</p> $76 - 41 = 35$ $\begin{array}{r} 70 + 6 \\ - 40 + 1 \\ \hline 30 + 5 = 35 \end{array}$	<p>Subtract numbers using concrete objects, pictorial representations, including those involving numbers, quantities and measures:</p> <ul style="list-style-type: none"> - A two-digit number and ones TU - U - A two-digit number and tens TU - T - Two two-digit numbers TU - TU <p>Show that subtraction of one number from another cannot be done in any order.</p>

Year 3: Column subtraction with exchange	
<p>Use expanded column method from Year 2 to support the move to columnar subtraction.</p> <p>No boundary crossing $242 - 131 = 111$</p> $\begin{array}{r} 242 \\ - 131 \\ \hline 111 \end{array}$ <p>Crossing one boundary $274 - 127 = 147$</p> $\begin{array}{r} 6 \ 1 \\ 274 \\ - 127 \\ \hline 147 \end{array}$ <p>Use examples of HTO + TO to support place value. Ensure that the larger number goes at the top.</p>	<p>Subtract numbers with up to three digits using the formal written methods of columnar subtraction where appropriate.</p> <p>Estimate and use the inverse (addition) to check answers to a calculation.</p>
Year 4: Column subtraction with exchange	
<p>Crossing two boundaries $224 - 48 = 176$ $3625 - 1249 = 2376$</p> $\begin{array}{r} 1 \ 11 \ 1 \\ 224 \\ - 48 \\ \hline 176 \end{array}$ $\begin{array}{r} 5 \ 11 \ 1 \\ 3625 \\ - 1249 \\ \hline 2376 \end{array}$ <p>Introduce zero only in the ones. For example, $430 - 217$</p>	<p>Subtract numbers with up to four digits using the formal written methods of columnar subtraction where appropriate.</p> <p>Estimate and use the inverse (addition) to check answers to a calculation.</p>
Year 5: Column subtraction (including decimals with up to two decimal places)	
<p>Extend Year 4 methods to larger numbers and use in decimal contexts including money and measures. All boundary crossings to be made.</p> <p>Use 0 as a multiple place holder (e.g. $\pounds 40.03 - \pounds 14.56 = \pounds 25.47$)</p> <p>and use 0 as a split place holder (e.g. $4060\text{kg} - 1456\text{kg} = 2604\text{kg}$)</p>	<p>Subtract whole numbers and decimals with more than four digits using columnar subtraction.</p> <p>Use subtraction methods in a range of real life and problem-based contexts.</p>
Year 6: Column subtraction (including decimals up to three decimal places)	
<p>Secure written methods in all problem solving contexts.</p> <p>Continue to practise and use the formal written method for larger numbers and decimals.</p> <p>Our aim is that by the end of Year 6 children use mental methods (with jottings) when appropriate, but for calculations, that they cannot do in their heads, they use an efficient formal written method accurately and with confidence.</p>	<p>Solve subtraction multi-step problems in context.</p>