





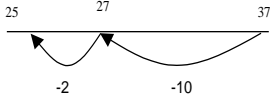
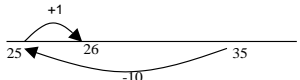
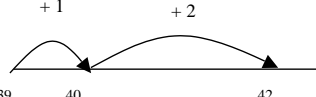



Subtraction

Foundation	Year 1	Year 2
<p>Key Objectives</p> <ul style="list-style-type: none"> they say which number is one more or one less than a given number. begin to relate addition to combining two groups of objects, and subtraction to 'taking away'. using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. 	<ul style="list-style-type: none"> read, write and interpret mathematical statements involving subtraction (-) and equals (=) signs. represent and use number bonds and related subtraction facts within 20. subtract one-digit and two-digit numbers to 20 i.e. $18 - 9$, including zero. solve simple one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems. $7 = \square - 9$. 	<ul style="list-style-type: none"> solve simple one-step problems with addition and subtraction: <ul style="list-style-type: none"> using concrete objects and pictorial representations, including those involving numbers, quantities and measures. applying their increasing knowledge of mental and written Methods. recall and use subtraction facts to 20 fluently, and derive and use related facts up to 100. add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers. show that subtraction is not commutative. i.e. $16 - 9$ is not $=$ to $9 - 16$. recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.
<ul style="list-style-type: none"> Use language of subtraction - take (away), leave, how many are left/left over? how many have gone? one less, two less, ten less, how many fewer is...? difference between, is the same as. Work with apparatus, e.g. bead strings to 20, Numicon and multilink.  Oral and practical work Songs and rhymes Practice counting back from a given one-digit number  Number stories using objects. <p>$8 - 3 =$</p>  Begin recording number sentences and solve simple missing number problems, e.g. <p>$7 - 3 = \square$ $7 - \square = 4$ $\square - 3 = 4$</p> Teacher model number sentences E.g. How many are there? How many now? (after some have been removed) so 8 take away 3 is 5. Use Numicon to find number bonds to ten.  	<ul style="list-style-type: none"> Use language of subtraction - subtract, minus, takeaway, difference between, more than, less than, how much less is...? and equals. Use - and = signs. Songs and rhymes Work with apparatus such as bead strings to 20, Numicon and multilink.  Physical and practical work on number tracks and semi structured number lines. Jumping backwards. Number stories, 15 people on a bus 3 get off, how many are left on? Solve missing number problems and show an understanding of the meaning of the equals sign. <p>$16 - 7 = \square$; $7 = 16 - \square$; $\square - 7 = 9$; $7 = \square - 9$.</p> Practice counting back in 10s from multiples of 10s. Finding the difference by counting on and comparing quantities  Solve simple problems involving subtraction, e.g. <i>John had twelve apples. He gave four away. How many apples did he have left?</i> Give change to 20p. Use Numicon and other manipulatives, with an emphasis on place value and language, to reinforce all of the above visually. 	<ul style="list-style-type: none"> Count back in 10s from any number to 100. Jump back on empty number line. <p>E.g. $37 - 12 = 25$</p>  Subtract 9 or 11 by subtracting 10 and adjusting, e.g. $35 - 9 = 26$  Find the difference between 2 towers of cubes, leading to using the empty number line for numbers that are close together 'count on' <p>e.g. $42 - 39 = 3$</p>  Use knowledge of number bonds to partition in order to subtract a one-digit number from a two-digit number on a number line. <p>E.g. $22 - 7 = 15$</p>  Progress to using a written formal method to subtract one or two digit numbers away from two-digit numbers. Use Base 10 to model exchanging practically and encourage children to draw the Base 10 alongside their calculations.

$$\begin{array}{r} 28 \\ -13 \\ \hline 15 \end{array}$$

Tens Ones

$$\begin{array}{r} 14 \\ -8 \\ \hline 6 \end{array}$$

$$\begin{array}{r} 14 \\ -6 \\ \hline 8 \end{array}$$

Be cautious of saying that you cannot do $4 - 6$ as this may confuse children later when they learn about negative numbers.

- Use addition as the inverse operation to check answers and to solve empty box problems.
E.g. $\square - 8 = 12$; $50 - \square = 20$; $65 + \square = 93$
- Children need to understand that subtraction is not commutative i.e. $16 - 9$ is not equal to $9 - 16$