

Year 1	Addition Year 2	Year 3
<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>24–29 Understanding addition and subtraction</u></p> <p>24 Understand the operation of addition and use the related vocabulary. Begin to recognise that addition can be done in any order. Begin to use the +, – and = signs to record mental calculations in a number sentence, and to recognise the use of symbols such as □ or Δ to stand for an unknown number.</p> <p>26 Begin to recognise that more than two numbers can be added together.</p> <p><u>32–41 Mental calculation strategies (+ and –)</u></p> <p>32 Use knowledge that addition can be done in any order to do mental calculations more efficiently; begin to partition into ‘5 and a bit’ when adding 6, 7, 8 or 9, then recombine (e.g. $6 + 8 = 5 + 1 + 5 + 3 = 10 + 4 = 14$).</p> <p>32 Identify near doubles, using doubles already known</p> <p>34 Add 9 to single-digit numbers by adding 10 then subtracting 1.</p> <p>34 Use patterns of similar calculations (e.g. $10 - 0 = 10$, $10 - 1 = 9$, $10 - 2 = 8$...).</p> <p>36, 38 Use known number facts and place value to add or subtract a pair of numbers mentally within the range 0 to at least 10, then 0 to at least 20.</p> <p>40 Begin to bridge through 10, and later 20, when adding a single-digit number.</p>	<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>24–29 Understanding addition and subtraction</u></p> <p>25 Extend understanding of the operation addition. Use and begin to read the related vocabulary. Use the +, – and = signs to record mental additions in a number sentence, and recognise the use of a symbol such as □ or Δ to stand for an unknown number. Recognise that addition can be done in any order.</p> <p>27 Understand that more than two numbers can be added. Begin to add three single-digit numbers mentally or three two-digit numbers with the help of apparatus (totals up to 100).</p> <p>25, 29 Understand that subtraction is the inverse of addition (subtraction reverses addition).</p> <p><u>32–41 Mental calculation strategies (+ and –)</u></p> <p>33 Use knowledge that addition can be done in any order to do mental calculations more efficiently. add three small numbers by putting the largest number first and/or find a pair totalling 10; partition into ‘5 and a bit’ when adding 6, 7, 8 or 9, then recombine; partition additions into tens and units, then recombine.</p> <p>33 Identify near doubles, using doubles already known</p> <p>35 Add/subtract 9 or 11: +/- 10 and adjust by 1. Begin to add/subtract 19 or 21: +/- 20 and adjust by 1.</p> <p>35 Use patterns of similar calculations.</p> <p>35 State the subtraction corresponding to a given addition, and vice versa.</p> <p>37, 39 Use known number facts and place value to add/subtract mentally.</p> <p>41 Bridge through 10 or 20, then adjust.</p>	<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>24–29 Understanding addition and subtraction</u></p> <p>25 Extend understanding of the operation of addition, read and begin to write the related vocabulary, and continue to recognise that addition can be done in any order. Use the +, – and = signs.</p> <p>27 Extend understanding that more than two numbers can be added; add three or four single-digit numbers mentally, or three or four two-digit numbers with the help of apparatus or pencil and paper.</p> <p>25, 29 Extend understanding that subtraction is the inverse of addition.</p> <p><u>32–41 Mental calculation strategies (+ and –)</u></p> <p>33 Use knowledge that addition can be done in any order to do mental calculations more efficiently. Add three or four small numbers by putting the largest number first and/or by finding pairs totalling 9, 10 or 11; partition into ‘5 and a bit’ when adding 6, 7, 8 or 9; partition into tens and units, then recombine</p> <p>33 Identify near doubles, using doubles already known</p> <p>35 Add and subtract mentally a ‘near multiple of 10’ to or from a two-digit number.</p> <p>35 Use patterns of similar calculations.</p> <p>35 Say or write a subtraction statement corresponding to a given addition statement, and vice versa.</p> <p>37, 39 Use known number facts and place value to add/subtract mentally.</p> <p>41 Bridge through a multiple of 10, then adjust.</p> <p><u>42–45 Pencil and paper procedures (+ and –)</u></p> <p>43, 45 Use informal pencil and paper methods to support, record or explain $HTU + TU$, $HTU + HTU$. Begin to use column addition for $HTU + TU$ where the calculation cannot easily be done mentally.</p>

Year 1

Addition Year 2

Year 3

+ = signs and missing numbers

$$\begin{array}{ll} 3 + 4 = \square & \square = 3 + 4 \\ 3 + \square = 7 & 7 = \square + 4 \\ \square + 4 = 7 & 7 = 3 + \square \\ \square + \nabla = 7 & 7 = \square + \nabla \end{array}$$

+ = signs and missing numbers

Continue using a range of equations as in Year 1 but with appropriate, larger numbers.

Extend to

$$14 + 5 = 10 + \square$$

and adding three numbers

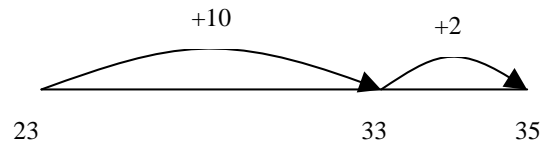
$$32 + \square + \square = 100 \quad 35 = 1 + \square + 5$$

Partition into tens and ones and recombine

$$\begin{aligned} 12 + 23 &= 10 + 2 + 20 + 3 \\ &= 30 + 5 \\ &= 35 \end{aligned}$$

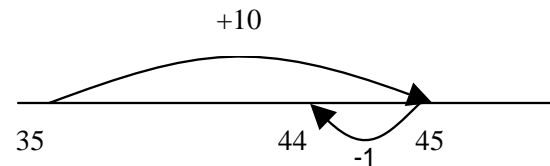
$$\begin{aligned} 23 + 12 &= 23 + 10 + 2 \\ &= 33 + 2 \\ &= 35 \end{aligned}$$

Extend to 3 figure numbers



Add 9 or 11 by adding 10 and adjusting by 1

$$35 + 9 = 44$$



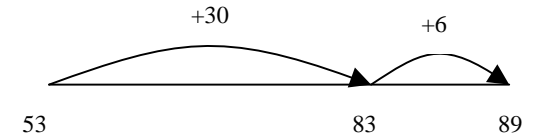
+ = signs and missing numbers

Continue using a range of equations as in Year 1 and 2 but with appropriate, larger numbers.

Partition into tens and ones and recombine

Partitioning the second number only e.g.

$$\begin{aligned} 36 + 53 &= 53 + 30 + 6 \\ &= 83 + 6 \\ &= 89 \end{aligned}$$



Add a near multiple of 10 to a two-digit number

Continue as in Year 2 but with appropriate numbers e.g. $35 + 19$ is the same as $35 + 20 - 1$.

pencil and paper procedures

$$83 + 42 = 125$$

$$\begin{array}{r} 83 \\ + 42 \\ \hline 5 \\ \hline 120 \\ + 5 \\ \hline 125 \end{array}$$