

Year 4	Addition Year 5	Year 6
<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>34–37 Understanding addition and subtraction</u> 34 Consolidate understanding of relationship between + and –. Understand the principles the of the commutative and associative laws as they apply or not to addition and subtraction.</p> <p><u>40–47 Mental calculation strategies (+ and –)</u> 40 Count on/back in repeated steps of 1,10 or 100. Partition into tens and units, adding the tens first. Identify near doubles, using known doubles Add/subtract the nearest multiple of 10, then adjust. 42 Continue to use the relationship between +/-. 42 Add 3 or 4 small numbers, finding pairs totalling 10, or 9 or 11. Add three two-digit multiples of 10. 44, 46 Use known number facts and place value to add or subtract mentally, including any pair of two-digit whole numbers</p> <p><u>48–51 Pencil and paper procedures (+ and –)</u> 48 Use informal pencil and paper methods to support, record or explain additions. Develop and refine written methods for: column addition of two whole numbers less than 1000, and addition of more than two such numbers; money calculations (for example, £7.85 ± £3.49).</p>	<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>40–47 Mental calculation strategies (+ and –)</u> 41 Partition into H, T and U, adding the most significant digits first. 41 Identify near doubles, such as 1.5 + 1.6. 41 Add or subtract the nearest multiple of 10 or 100, then adjust. 43 Develop further the relationship between addition and subtraction. 43 Add several numbers (e.g. four or five single digits, or multiples of 10 such as 40 + 50 + 80). 45, 47 Use known number facts and place value for mental addition and subtraction (e.g. 470 + 380, 7.4 + 9.8).</p> <p><u>48–51 Pencil and paper procedures (+ and –)</u> 49 Use informal pencil and paper methods to support, record or explain additions. Extend written methods to: column addition of two integers less than 10000; addition of more than two integers less than 10000; addition of a pair of decimal fractions, both with one or both with two decimal places (e.g. £29.78 + £53.34).</p>	<p>Addition Objectives (excluding rapid recall)</p> <p><u>Calculations</u> <u>40–47 Mental calculation strategies (+ and –)</u> 41 Consolidate all strategies from previous year, including: add or subtract the nearest multiple of 10, 100 or 1000, then adjust; use the relationship between addition and subtraction; add several numbers. 45, 47 Use known number facts and place value to consolidate mental addition/subtraction (e.g 470 + 380, 7.4 + 9.8).</p> <p><u>48–51 Pencil and paper procedures (+ and –)</u> 49 Use informal pencil and paper methods to support, record or explain additions. Extend written methods to column addition of numbers involving decimals.</p>

Year 4

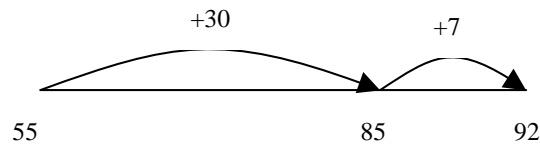
+ = signs and missing numbers

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

Partition into tens and ones and recombine

Either partition both numbers and recombine or partition the second number only e.g.

$$\begin{aligned} 55 + 37 &= 55 + 30 + 7 \\ &= 85 + 7 \\ &= 92 \end{aligned}$$



Add the nearest multiple of 10, then adjust

Continue as in Year 2 and 3 but with appropriate numbers e.g. $63 + 29$ is the same as $63 + 30 - 1$

Pencil and paper procedures

$$358 + 73 = 431$$

$$\begin{array}{r} 358 \\ + 73 \\ \hline 11 \\ 120 \\ \hline 300 \\ 431 \end{array}$$

leading to

$$\begin{array}{r} 358 \\ + 73 \\ \hline 431 \end{array}$$

Extend to decimals in the context of money.

Addition Year 5

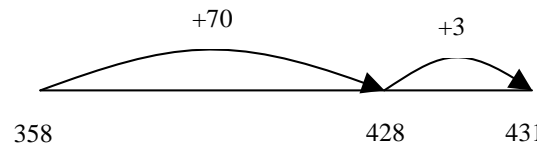
+ = signs and missing numbers

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

Partition into hundreds, tens and ones and recombine

Either partition both numbers and recombine or partition the second number only e.g.

$$\begin{aligned} 358 + 73 &= 358 + 70 + 3 \\ &= 428 + 3 \\ &= 431 \end{aligned}$$



Add or subtract the nearest multiple of 10 or 100, then adjust

Continue as in Year 2, 3 and 4 but with appropriate numbers e.g. $458 + 79 =$ is the same as $458 + 80 - 1$

Pencil and paper procedures

Extend to numbers with at least four digits
 $3587 + 675 = 4262$

$$\begin{array}{r} 3587 \\ + 675 \\ \hline 4262 \end{array}$$

Revert to expanded methods if the children experience any difficulty.

Extend to decimals (same number of decimal places) and adding several numbers (with different numbers of digits).

Year 6

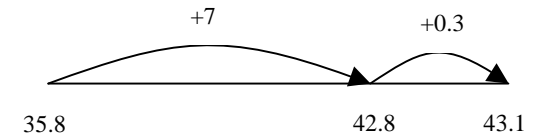
+ = signs and missing numbers

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

Partition into hundreds, tens, ones and decimal fractions and recombine

Either partition both numbers and recombine or partition the second number only e.g.

$$\begin{aligned} 35.8 + 7.3 &= 35.8 + 7 + 0.3 \\ &= 42.8 + 0.3 \\ &= 43.1 \end{aligned}$$



Add the nearest multiple of 10, 100 or 1000, then adjust

Continue as in Year 2, 3, 4 and 5 but with appropriate numbers including extending to adding 0.9, 1.9, 2.9 etc

Pencil and paper procedures

Extend to numbers with any number of digits and decimals with 1 and 2 decimal places.
 $124.9 + 117.25 = 242.15$

$$\begin{array}{r} 124.9 \\ + 117.25 \\ \hline 242.15 \end{array}$$

Revert to expanded methods if the children experience any difficulty.

Extend to decimals (either one or two decimal places).