


Year 3 and 4 Calculation Methods


Addition



add more plus
increase total
sum altogether

Teaching with a Mountain View

Subtraction



subtract minus
less take away
decrease leave
fewer difference

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Multiplication



multiply lots of
times groups of
multiplied by array
repeated product
addition

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Division



divide remainder
share share equally
groups of divided by
repeated each
subtraction

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Addition & Subtraction

Year 3 and 4

Addition

$$\begin{array}{r} 297 \\ + 426 \\ \hline 723 \\ \hline \end{array}$$

1. Write numbers above each other - line up the digits correctly.
2. Start with the smallest column.
3. When the sum is more than 9 write the 'tens' below the next column.

Year 3 → 3-digits Year 4 → 4-digits.

Subtraction

$$\begin{array}{r} 2824 \\ - 173 \\ \hline 151 \\ \hline \end{array}$$

1. Write numbers above each other - line up digits correctly.
2. Start with smallest value column.
3. Top number - bottom number. When this is not possible exchange from the next column.

NC expectations (Y3 up to 3d+3d) (Y4 up to 4d+4d)

Multiplication - Year 3 - Grid Method

Multiplication → Year 3 (up to 2d x 1d)

$$42 \times 3$$

x	40	2
3	120	6

$$\begin{array}{r} 120 \\ + 6 \\ \hline 126 \end{array}$$

1. Partition the ~~divident~~ ^{number} into the grid method.
2. Multiply each part by the other number.
3. Add the products from step 2 to find the final answer.

NC expectations (Y3 up to 2d x 1d)

Multiplication - Year 4 - Expanded or compact formal method

Multiplication → Year 4 (up to 3d x 1d)

Expanded formal method or Compact formal method.

$$\begin{array}{r} 129 \\ \times 3 \\ \hline 27 \\ 60 \\ + 300 \\ \hline 387 \end{array}$$

1. Write the numbers above each other with room below.
2. Multiply each digit by 3 and write in its own row.
3. Add up all the rows.

$$\begin{array}{r} 129 \\ \times 3 \\ \hline 387 \end{array}$$

1. Write above each other.
2. Multiply ↓ digit by 3 at a time and write below.
3. Carry over any 'tens' to next

NC expectations (Y4 up to 3d x 1d)

Division

Division → Year 3 and 4 (up to 2d ÷ 1d)

$$52 \div 3$$

1. Draw a numberline from 0 to the number you are dividing.
2. 'Jump' in multiples of your divisor eg. I jumped 30 which is 10 lots of 3.
3. Keep 'jumping' as close as you can to the number.
4. Any you can't jump at the end is your remainder.
5. The number of 3s you jumped is your answer.

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NC expectations (Y3 & Y4 up to 2d ÷ 1d)