

Calculation Methods Used in Year 4

Addition

At the start of the year, the children use an expanded method for addition.

$$1728 + 3781 = 5509$$
$$\begin{array}{r} 1000 \quad 700 \quad 20 \quad 8 \\ + 3000 \quad 700 \quad 80 \quad 1 \\ \hline 5000 \quad 500 \quad 0 \quad 9 \\ \hline 1000 \quad 100 \end{array}$$

When they can use this method confidently, they move on to the formal column method.

$$\begin{array}{r} 5463 \\ + 1637 \\ \hline 7100 \\ 111 \end{array}$$

$$\begin{array}{r} 45.73 \\ + 32.12 \\ \hline 77.85 \end{array}$$

Subtraction

At the start of the year, the children use an expanded method for subtraction.

$$6374 - 3469 = 2905$$
$$\begin{array}{r} 5000 \quad 60 \\ \del{6000} \quad 1300 \quad \del{70} \quad 14 \\ - 3000 \quad 400 \quad 60 \quad 9 \\ \hline 2000 \quad 900 \quad 0 \quad 5 \end{array}$$

When they can use this method confidently, they move on to the formal column method with whole numbers and decimals up to 4 digits.

$$\begin{array}{r} 5 \quad 6 \\ \del{6} \quad 13 \quad \del{7} \quad 14 \\ - 3 \quad 4 \quad 6 \quad 9 \\ \hline 2 \quad 9 \quad 0 \quad 5 \end{array}$$

$$\begin{array}{r} 5 \quad 6 \\ \del{6} \quad 13. \quad \del{7} \quad 14 \\ - 3 \quad 4. \quad 6 \quad 9 \\ \hline 2 \quad 9. \quad 0 \quad 5 \end{array}$$

Multiplication

The children use an expanded method for multiplication. They multiply numbers up to 3 digits by a single digit.

They start by expanding the number first.

$$\begin{array}{r} 300\ 50\ 4 \\ \times \quad 3 \\ \hline 12\ (3 \times 4) \\ 150\ (3 \times 50) \\ + 900\ (3 \times 300) \\ \hline 1062 \end{array}$$

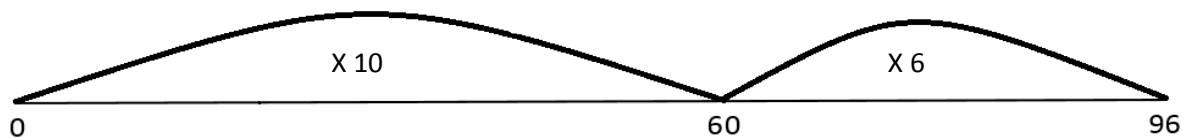
Then move on to this method.

$$\begin{array}{r} 354 \\ \times \quad 3 \\ \hline 12\ (3 \times 4) \\ 150\ (3 \times 50) \\ + 900\ (3 \times 300) \\ \hline 1062 \end{array}$$

Division

The children use a blank number-line to solve division calculations.

$$96 \div 6 = 16$$



Children will extend to using chunks in multiples of 10 when using larger numbers.

$$608 \div 8 = 76$$

