

Year Five - Subtraction

- **Subtract whole numbers with more than 4 digits, including using formal written method (columnar subtraction)**

NB Ensure that children are confident with the methods outlined in the previous year's guidance before moving on.

Continue to teach the use of **empty number lines** with larger numbers and decimals, as appropriate.

Continue to develop the **formal written method for subtraction** with three and four digit numbers (see Y4 guidance), returning to an expanded method and using base ten materials, if necessary.

$$503 - 278 = 225$$

$$\begin{array}{r} 500 + 0 + 3 \\ - 200 + 70 + 8 \\ \hline \end{array} \quad \begin{array}{r} 400 + 90 + 13 \\ - 200 + 70 + 8 \\ \hline 200 + 20 + 5 \end{array}$$

In this example 503 has to be partitioned into 400+90+13 in order to carry out the subtraction calculation.

This leads into the **formal written method** (there is potential for error in this example):

$$\begin{array}{r} \\ \cancel{5} \cancel{0} \cancel{3} \\ - 278 \\ \hline 225 \end{array}$$

There are no tens in the first number (503) so we have to exchange a hundred for 10 tens before we can exchange a ten for ten ones/units

NB It would be appropriate to discuss the use of mental calculation methods with an example like this one, i.e. would an empty number line be a more efficient method for these numbers?

When children are confident extend with larger numbers (and decimal numbers). Return to an expanded method, if necessary.

$$12731 - 1367 = 11364$$

$$\begin{array}{r} ^6 ^{12} ^{11} \\ 12731 \\ - \quad 1367 \\ \hline 11364 \end{array}$$

In this example it has been necessary to exchange from the tens and the hundreds columns.

NB If children are making significant errors, provide calculations where only one exchange is required.

Introduce subtraction of decimals, initially in the context of money and measures.

$$£166.25 - £83.72 = £82.53$$

$$\begin{array}{r} ^{16} ^5 ^{12} \\ 166.25 \\ - \quad 83.72 \\ \hline 82.53 \end{array}$$

Ensure the decimal points line up.

Continue to practise and apply the formal written method with large numbers and decimals throughout year five.

NB If, at any time, children are making significant errors, return to the previous stage in calculation.

Year Six - Subtraction

No objectives have been included in the programmes of study explicitly related to written methods for subtraction in Y6. However, there is an expectation that children will continue to practice and use **the formal written method for larger numbers and decimals** and use these methods when solving problems, when appropriate (see previous years' guidance for methods).

Our aim is that by the end of Y6 children **use mental methods (with jottings)** when appropriate, but for calculations that they cannot do in their heads, they use an efficient **formal written method** accurately and with confidence.