

Subtraction -

Stage 1

Children understand the concept of subtraction as taking a number away from another. They understand and use – and = symbols accurately. Calculations should be written on either side of the equals sign so = is not just interpreted as the answer.

$$6 - 2 = 4$$

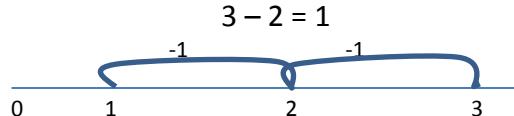
$$4 = 6 - 2$$

Children use Numicon and visual representations to subtract numbers.

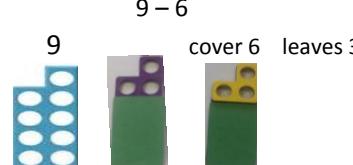


$$3 - 2 = 1$$

Counting backwards in ones on a number line.

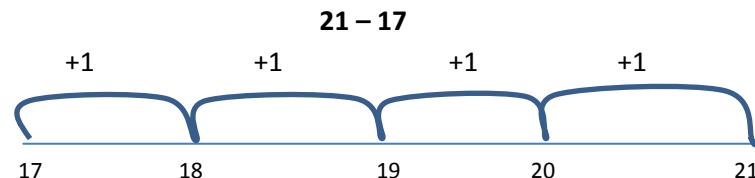


Use Numicon to subtract
9 - 6

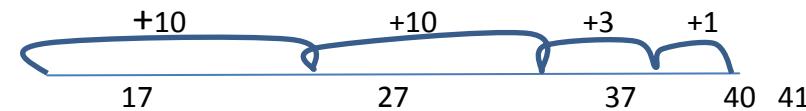


Stage 2

Begin to 'find the difference' by counting on in ones using a number line.



Leading to **41 - 17 = 24**



Years 1 and 2

Stage 3

Subtracting 2 digit numbers from other 2 digit numbers using a column method. Use expanded method first with no exchanging at this stage.

Model both methods alongside each other to show 'same and difference' of methods.

Expanded method

$$36 + 12 = \underline{30 + 6}$$

$$\text{Partition} \quad \underline{- 10 + 2}$$

$$\text{and} \quad \underline{20 + 4}$$

Recombine $\quad = 24$

Formal method

$$\begin{array}{r} 36 \\ - 12 \\ \hline 24 \end{array}$$

Stage 4

Column subtraction of 2, 3 and 4 digit numbers using expanded methods first but show both methods together to discuss similarities and differences of both methods.

Pupils must have a secure understanding of place value and partitioning

$$\begin{array}{r} 20 \\ 16 \\ \hline 30 + 6 \\ - 10 + 9 \\ \hline 10 + 7 \\ = 17 \end{array}$$

leading to

$$\begin{array}{r} 80 \\ 13 \\ \hline 600 + 90 + 3 \\ - 200 + 70 + 5 \\ \hline 400 + 10 + 8 \\ = 418 \end{array}$$

Recommended by the end of year 2

Recommended by the end of year 3

Stage 5 - Formal written methods

Short written methods using 'exchange'.

$$\begin{array}{r} 8 \ 1 \\ 7 \ 8 \cancel{9} \ 3 \\ - 5 \ 3 \ 8 \ 5 \\ \hline 2 \ 5 \ 0 \ 8 \end{array}$$

Recommended by the end of year 4

Stage 6 – Subtraction using decimals

$$\begin{array}{r} 5 \ 16 \ 1 \\ 3 \cancel{6} \ . \cancel{7} \ 6 \\ - 1 \ 3 \ . \ 8 \ 7 \\ \hline 2 \ 2 \ . \ 8 \ 9 \end{array}$$

Recommended by the end of year 5

In years 5 and 6 pupils continue practising formal written methods with increasing large numbers so they are fluent and precise.