

Subtraction: Indigo (Y5)

Mental Work

Work mentally (with jottings if needed)

- subtract a pair of 2-digit numbers or 3-digit multiples of 10, e.g. $86 - 38$, $620 - 380$ (partition: subtract hundreds, tens and ones separately and recombine)
- subtract a near multiple of 10 or 100 to any 2-digit or 3-digit number, e.g. $537 - 198$ (subtract a multiple of 10 or 100 and adjust)
- subtract by counting up from the smaller to the larger number (when numbers close together)
- find the difference between near multiples of 100, e.g. $607 - 588$, or of 1000, e.g. $6070 - 4087$ (subtract a multiple of 10 or 100 and adjust, double and adjust)
- subtract any pairs of decimal fractions each with units and tenths, e.g. $6.3 - 4.8$ (use knowledge of $63 - 48$)
- count back in minutes and hours, bridging through 60 (analogue and digital times); partition

Children should be encouraged to:

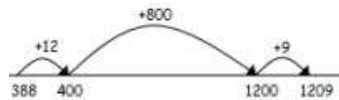
* **approximate** their answers before calculating

* **consider if a mental calculation** would be appropriate **before** using written methods

* **check their answers** after calculation using an appropriate strategy

Number lines

Where the numbers involved in the calculation are close together or near to multiples of 10, 100, etc., counting **on** using a number line should be used, e.g. $1209 - 388 = 821$. This is much less vulnerable to errors and is much more efficient. At this level, number lines can be encouraged for **any numbers**.



Encourage the children to stop at appropriate BFZN.

To support finding the difference between two numbers, use a number line and identify appropriate BFZNs between the two numbers. Then count on in multiples of 10 or 100 between these identified numbers.

Recording: Decomposition

As in Y4, children should be confident in dealing with zeros and deciding when a numberline could be more effective (i.e. when more than one zero)

They should then move onto standard decomposition of numbers with more than 4 digits.

Solve 2 step problems involving subtraction

Use rounding and the inverse operation to estimate and check answers to a suitable degree of accuracy.

Missing number sentences

Using the digits 5, 6, 7 and 8 solve this problem

$$2 \square\square - \square\square = 178$$