

Key Stage 1 – Subtraction

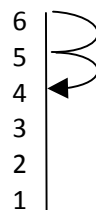
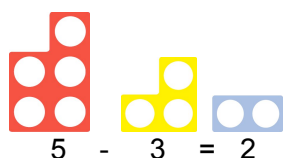
Y1

Through practical and meaningful contexts and informal written methods.

- We made 6 cakes. We ate 2 of them. How many cakes are left?



- Link to vertical number line $6 - 2 =$



- Find the difference within 20.
- Represent and use number bonds within 20.
- Record using subtraction ($-$) and equals signs ($=$)
- Derive related facts up to 20.

$$\begin{array}{ll} 5 - 2 = \square & \square = 5 - 2 \\ 5 - \square = 3 & 3 = \square - 2 \\ \square - 2 = 3 & 3 = 5 - \square \\ \square - \square = 3 & 3 = \square - \square \end{array}$$



- Counting back on a 100 square and a vertical number line.

National Curriculum requirements:

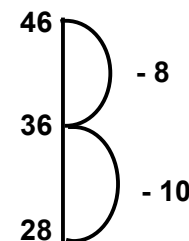
Subtract 1 digit and 2 digit numbers up to 20, including 0.
Represent and use number bonds and related subtraction facts.

Y2

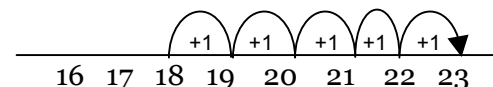
Through practical and meaningful contexts.

- Fluent recall of bonds to 20 and within 20.
- Derive and use related facts up to 100
e.g. $10 - 7 = 3$ so $100 - 70 = 30$.
- Counting back by partitioning second number. Subtract the ones first to be in line with columnar subtraction

E.g. $46 - 18$
 $46 - 10 - 8$



- Find the difference by counting up (only when the difference is small).
 $23 - 18 = 5$



- Recognise and use the inverse relationship between addition and subtraction
- Show that subtraction is not commutative (done in any order)
- Progressing to the partitioned columnar method in preparation for year 3
- Subtraction of money, including change.

National Curriculum requirements:

(using concrete objects, pictorial representations and mentally)

Subtract 2 digit numbers and ones.

Subtract 2 digit number and tens.

Subtract two 2 digit numbers.

Subtract three 1 digit numbers.

Key Stage 2 – Subtraction

Y3

- Continue with vertical number line subtraction progressing to the expanded columnar subtraction method.

$$89 - 35 = 54$$

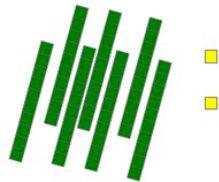
$$80 + 9$$

$$- 30 + 5$$

$$\underline{50 + 4 = 54}$$

- Introduce exchanging through the expanded columnar subtraction method.

$$72 - 47$$



$$60 \cancel{70} + 12$$

$$- 40 + 7$$

$$\underline{20 + 5 = 25}$$

- Progressing on to compact columnar subtraction.

T O 4 7 - 2 3 --- 2 4	HTO 8 6 4 - 6 2 1 --- 2 4 3	T O ⁴ 5 1 - 3 6 --- 1 5
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- Emphasise value of digit, e.g. 4 tens subtract 2 tens = 2 tens. Use the correct language for subtraction i.e. exchange rather than borrow.
- Subtract amounts of money to give change.

Video clips:

[Subtraction - teaching children to consider the most appropriate methods before calculating](#)

[Introducing partitioned column subtraction method, from practical to written](#)

National Curriculum requirements:

Subtract numbers with up to 3 digits using the formal written method of columnar subtraction.

Y4

- Continue with partitioned columnar subtraction progressing to compact columnar subtraction.

HTO ³ 4 3 7 - 1 8 2 --- 2 5 5	H T O ³ 4 ¹² 3 ¹² 1 2 - 1 8 7 --- 2 4 5	H T O ⁵ 6 ⁹ 1 ⁰ 0 1 4 - 3 4 7 --- 2 5 7	Th H T O 8 ³ 4 ¹¹ 2 ¹⁶ 1 6 - 2 1 7 7 --- 6 2 4 9
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- Estimate and use inverse operations to check answers to a calculation.
- Subtract amounts of money using columnar method.

Video clips:

[Subtraction - teaching children to consider the most appropriate methods before calculating](#)

[Introducing partitioned column subtraction method, from practical to written](#)

[Moving to the compact column method of subtraction](#)

National Curriculum requirements:

Subtract numbers up to 4 digits using the formal written method of columnar subtraction.

Key Stage 2 – Subtraction

Y5

- Continue with compact columnar subtraction, including subtraction of decimals.

$$\begin{array}{r}
 \overset{2}{\cancel{3}} \overset{10}{\cancel{10}} \overset{4}{\cancel{5}} \overset{6}{\cancel{6}} \\
 - \quad 2128 \\
 \hline
 28,928
 \end{array}$$

$$\begin{array}{r}
 \overset{6}{\cancel{7}} \overset{10}{\cancel{16}} \overset{8}{\cancel{9}} \cdot \overset{0}{\cancel{0}} \\
 - \quad 372.5 \\
 \hline
 6796.5
 \end{array}$$

- Use rounding to check answers to calculations and to determine, in the context of a problem, levels of accuracy.

Video clip:

[Moving to the compact column method of subtraction](#)

National Curriculum requirements:

Subtract numbers with more than 4 digits.

Y6

- Continue with compact columnar subtraction, including subtraction of decimals.

$$\begin{array}{r}
 \overset{0}{\cancel{1}} \overset{14}{\cancel{15}} \overset{9}{\cancel{10}} \overset{6}{\cancel{6}} \overset{9}{\cancel{9}} \\
 - \quad 89,949 \\
 \hline
 60,750
 \end{array}$$

$$\begin{array}{r}
 \overset{0}{\cancel{1}} \overset{10}{\cancel{15}} \cdot \overset{3}{\cancel{4}} \overset{1}{\cancel{1}} \overset{9}{\cancel{9}} \text{ kg} \\
 - \quad 36 \cdot 08 \text{ } \bigcirc \text{ kg} \\
 \hline
 69 \cdot 339 \text{ kg}
 \end{array}$$

- Use estimation to check answers to calculations and to determine, in the context of a problem, levels of accuracy.

National Curriculum requirements:

Subtract numbers with more than 4 digits.