

## Written calculation strategies for subtraction

### Step 1

#### Statutory Guidance

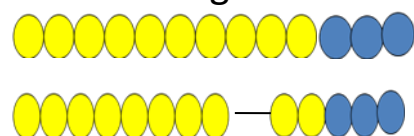
Subtract one-digit and two-digit numbers to 20, including zero.

Solve one-step problems that involve subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = - 9$ .

#### Possible representations

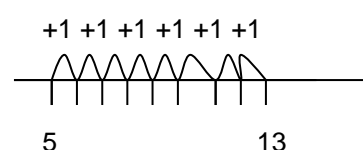
Using concrete objects

e.g.  $13 - 5 =$

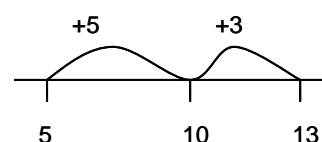


Using pictorial representations

$13 - 5 =$



Find the difference using more efficient jumps



Children move onto number lines only when confident.

### Step 2

#### Statutory Guidance

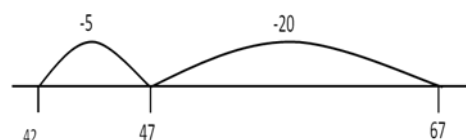
Subtract numbers using concrete objects, pictorial representations, and mentally, including:

- a two-digit number and ones
- a two-digit number and tens
- two two-digit numbers
- adding three one-digit numbers

#### Possible representations

e.g.  $67 - 25 =$

2 digit subtract 2 digit using efficient place value jumps



#### Non-statutory guidance

suggests expanded decomposition with no exchanges

$$\begin{array}{r} 90 \quad 8 \quad 98 \\ - 50 \quad 4 \quad 54 \\ \hline 40 \quad 4 \quad = 44 \end{array}$$

### Step 3

#### Statutory Guidance

Subtract numbers with up to three digits, using formal written methods of columnar subtraction

e.g.  $756 - 84 =$

$$\begin{array}{r} 600 \quad 150 \\ \cancel{700} \quad \cancel{50} \quad 6 \quad 756 \\ - \quad \quad 80 \quad 4 \quad \quad 84 \\ \hline 600 \quad 70 \quad 2 \quad = 672 \end{array}$$

### Step 4

#### Statutory Guidance

Subtract numbers with up to 4 digits using the formal written methods of columnar subtraction where appropriate

e.g.  $8417 - 3908 =$

$$\begin{array}{r} 7 \quad 1 \quad 0 \quad 1 \\ \cancel{8} \quad 4 \quad \cancel{1} \quad 7 \\ - 3 \quad 9 \quad 0 \quad 8 \\ \hline 4 \quad 5 \quad 0 \quad 9 \end{array}$$

Non-statutory guidance Linked to money and measures (2 decimal places).

$$\begin{array}{r} 5 \quad 1 \\ \cancel{6} \quad 7 \quad . \quad 7 \quad 5 \\ - 2 \quad 8 \quad . \quad 5 \quad 0 \\ \hline 3 \quad 9 \quad . \quad 2 \quad 5 \end{array}$$

### Step 5

#### Statutory Guidance

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

e.g.  $12407 - 9614 =$

$$\begin{array}{r} 0 \quad 1 \quad 1 \quad 3 \quad 1 \\ \cancel{1} \quad \cancel{2} \quad \cancel{4} \quad 0 \quad 7 \\ - 9 \quad 6 \quad 1 \quad 4 \\ \hline 2 \quad 7 \quad 9 \quad 3 \end{array}$$

#### Measurement

Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling.

$$\begin{array}{r} 8 \quad 1 \quad 3 \quad 1 \\ \cancel{9} \quad . \quad \cancel{4} \quad 2 \\ - 6 \quad . \quad 7 \quad 8 \\ \hline 2 \quad . \quad 6 \quad 4 \end{array}$$