

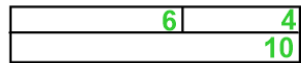
Addition Written Calculation Progression Y1 to Y6

- Y1**
- Number bonds and related addition facts within 20
 - Add 1 and 2 digit numbers to 20, including zero

Context based Bridging 10 → Shuffling Place Value

Concrete → Pictorial → Abstract Partition single digits

Representations emphasise part part whole relationship



Teacher to show picture of the bar model

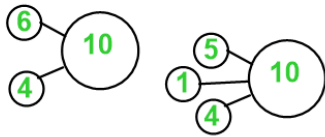
Use stem sentences

$$6 + 4 = 10$$

$$4 + 6 = 10$$

$$10 - 6 = 4$$

$$10 - 4 = 6$$



- Y2**
- 2 digit + 1 digit
 - 1 digit + 1 digit + 1 digit
 - 2 digit + tens
 - Addition is commutative
 - 2 digit + 2 digit (don't cross 100)

Context based Bridging 10 → Shuffling

Concrete → Pictorial → Abstract Place Value

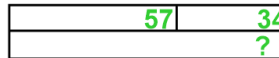
Adding 10s to any 2 digit number

Don't partition the first number Use the bar model to develop number sense and to show the commutative property of addition

$$57 + 34 = 57 + 4 + 30$$

$$57 + 4 = 61$$

$$61 + 30 = 91$$



- Y3**
- Numbers up to 3 digits
 - Progress to formal column addition

Context based

Show the bar model to develop number sense

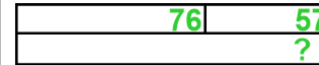
2 digit + 2 digit (don't partition the first number)

Bar model → expanded column → compact column

Use an informal method if total < 100

Use the bar model to develop number sense and to show the commutative property of addition

$$\begin{array}{r} 76 \\ +57 \\ \hline 13 \text{ (6+7)} \\ 120 \text{ (70+50)} \\ \hline 133 \end{array}$$



- Y4**
- Numbers up to 4 digits
 - Column addition
 - Choose appropriate method for numbers involved

Context based

Show the bar model to develop number sense

Use an informal method if total < 100

Use the bar model to develop number sense eg. approximate answer; tell me something about the total etc.

$$\begin{array}{r} +1 \ +1 \ +1 \\ 3 \ 4 \ 6 \ 7 \\ +1 \ 8 \ 4 \ 3 \\ \hline 5 \ 3 \ 1 \ 0 \end{array}$$



- Y5**
- Numbers with more than 4 digits
 - Column addition
 - Choose appropriate method for numbers involved

Context based

Show the bar model to develop number sense and to choose efficient method of calculation

Use decimal numbers - vary the place values

$$\begin{array}{r} 57.3 + 6.08 \\ \hline 57.30 \\ + 6.08 \\ \hline 63.38 \end{array}$$

Missing box calculations

$$\begin{array}{r} \boxed{4} \ \boxed{2} \\ + \boxed{1} \ \boxed{5} \ \boxed{1} \\ \hline 5 \ 9 \ 1 \end{array}$$

→ Move on to re-grouped numbers

- Y6**
- Multi-step problems in context
 - Choose appropriate addition method for the numbers involved

Context based

Use decimal numbers - vary the place values

$$23.04 + 1.689$$

$$\begin{array}{r} 23.040 \\ + 1.689 \\ \hline 24.729 \end{array}$$

Missing box calculations

$$\begin{array}{r} \boxed{} \ \boxed{6} \ \boxed{} \ \boxed{8} \\ + \boxed{3} \ \boxed{} \ \boxed{9} \ \boxed{} \\ \hline 9 \ 0 \ 1 \ 9 \end{array}$$