



**WAYCROFT**

MULTI ACADEMY TRUST

*Living and Learning Together*

Progression in  
Written Calculation  
Year 3

This progression in written calculations has been written in consultation with the teaching staff and the New Curriculum for Mathematics to suit the current needs of our.

Please note that children will move through this progression at different rates and teachers will use their professional judgement to decide when the most appropriate time is to move the children on. There may be occasions when other methods will be taught to suit the needs of individual pupils.

## MULTIPLICATION

**By the end of Year 3, Children should be able to:**

- Multiply a two-digit number by a one-digit number (TO x O). Children should use mental methods and progress on to more formal written methods throughout the year.
- Recall multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables (with a specific focus on the 3, 4 and 8 times tables)

**Partitioning:** This method is used during mental arithmetic tasks rather than being a written calculation.

E.g.  $63 \times 8 = (60 \times 8) + (3 \times 8)$   
 $\quad = 480 + 24$   
 $\quad = 504$

**Expanded Written Method for short multiplication e.g.  $63 \times 8$**

$$\begin{array}{r}
 \begin{array}{r}
 63 \\
 \times 8 \\
 \hline
 24 \text{ (3 X 8)} \\
 480 \text{ (60 X 8)} \\
 \hline
 504
 \end{array}
 \end{array}$$

**Formal written method for short multiplication e.g.  $52 \times 7$**

$$\begin{array}{r}
 \begin{array}{r}
 52 \\
 \times 7 \\
 \hline
 364 \\
 \hline
 \color{red}{1}
 \end{array}
 \end{array}$$

## DIVISION

**By the end of Year 3, Children should be able to:**

- Divide a two-digit number by a one-digit number (TO ÷ O). Children should use mental methods and progress on to more formal written methods.
- Recall multiplication and division facts for the 2, 3, 4, 5, 8 and 10 times tables (with a specific focus on the 3, 4 and 8 times tables)

**Formal written method for short division e.g.  $92 \div 4$**

$$\begin{array}{r}
 23 \\
 4 \overline{) 92} \\
 \underline{8} \phantom{0} \\
 12 \\
 \underline{12} \\
 0
 \end{array}$$

## ADDITION

By the end of Year 3, Children should be able to:

- Add whole numbers with up to three digits.

Formal written method of addition, involving whole numbers e.g.  $548 + 387$

$$\begin{array}{r} 548 \\ + 387 \\ \hline 935 \\ \hline 11 \end{array}$$

## SUBTRACTION

By the end of Year 3, Children should be able to:

- Subtract whole numbers with up to three digits.

Formal written method of subtraction, involving whole numbers e.g.  $582 - 237$

$$\begin{array}{r} 5 \overset{7}{\cancel{8}} \overset{1}{2} \\ - 237 \\ \hline 345 \\ \hline \end{array}$$