

Add

For mental calculations, an expanded method can be taught:

$$44 + 33 = 77$$

$$40 + 30 = 70$$

$$4 + 3 = 7$$

The written method builds on the column method taught in Y2

$$\begin{array}{r} \text{a) } 44 \\ +33 \\ \hline 77 \end{array}$$

$$\begin{array}{r} \text{b) } 44 \\ +37 \\ \hline 81 \\ \cancel{1} \end{array}$$

$$\begin{array}{r} \text{c) } 444 \\ +377 \\ \hline 781 \\ \cancel{1} \end{array}$$

Carry and cross out

Multiply

Times tables: 2x 5x 10x
3x 4x 6x

15 x 3 is shown as 10 x 3 = 30 add
5 x 3 = 15

Subtract

All subtraction work is underpinned by practical activities with Base 10 apparatus

For mental calculations, an expanded method can be taught:

$$53 - 41 = 12$$

$$50 - 40 = 10$$

$$3 - 1 = 2$$

This will not become the pupils' standard written method because column subtraction will be introduced

$$\begin{array}{r} 53 \\ -41 \\ \hline 12 \end{array}$$

$$\begin{array}{r} 5 \quad 1 \\ \cancel{6} \quad 3 \\ -4 \quad 4 \\ \hline 1 \quad 9 \end{array}$$

Divide

30 ÷ 5 = 6 BECAUSE 6 x 5 = 30

Prove these links with arrays and with sharing AND grouping