

Years 5 & 6 Addition

Addition Year 5

TTh	Th	H	T	O
10000 10000	1000 1000 1000 1000	100 100 100	10 10 10 10 10	1 1 1 1
10000	1000 1000 1000 1000	100 100 100	10 10 10 10 10	1 1 1
3	9	7	8	5

2	6	5	8	4
+	1	3	2	0
3	9	7	8	5

TTh	Th	H	T	O
10000 10000	1000 1000 1000 1000	100 100 100	10 10 10 10 10	1 1 1 1
10000	1000 1000 1000 1000	100 100 100	10 10 10 10 10	1 1 1

2	6	5	7	4
+	1	6	2	3
4	2	8	0	5
1	1			

Part-whole model

Bar model

Year 5 + 6 Addition

$$\begin{array}{r} 8139 \\ + 2156 \\ \hline 10295 \end{array}$$

$$\begin{array}{r} 424850 \\ + 5236 \\ \hline 430086 \end{array}$$

$$\begin{array}{r} 379876 \\ + 585215 \\ \hline 965091 \end{array}$$

Years 5 & 6 Multiplication

Multiplication Yrs 5+6

$$34 \times 23 = 782$$

x	30	4
20	600	80
3	90	12

$$600 + 90 + 80 + 12 = 782$$

$$\begin{array}{r} 34 \\ \times 23 \\ \hline 102 \\ + 680 \\ \hline 782 \end{array}$$

$$\begin{array}{r} 326 \\ \times 32 \\ \hline 652 \quad (326 \times 2) \\ + 9780 \quad (326 \times 30) \\ \hline 10432 \\ \hline \end{array}$$

$$\begin{array}{r} 6324 \\ \times 33 \\ \hline 18972 \quad (6324 \times 3) \\ + 189720 \quad (6324 \times 30) \\ \hline 208692 \\ \hline \end{array}$$

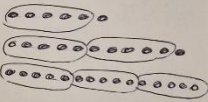
Years 5 & 6 Division

Division Year 5

$396 \div 3 =$

H	T	O
300 300 300	90 90 90 90 90	60 60 60

		1	3	2	
	3	3	9	6	

$$\begin{array}{r} 123 \\ 3 \overline{) 396} \\ \underline{396} \\ 0 \end{array}$$


$$\begin{array}{r} 1324 \\ 4 \overline{) 5296} \\ \underline{416} \\ 1196 \\ \underline{1160} \\ 366 \\ \underline{364} \\ 26 \end{array}$$

Division Year 6

$741 \div 13 = 57$

13 26 39 52 65 78 91

$$\begin{array}{r} 057 \\ 13 \overline{) 741} \\ \underline{65} \\ 91 \\ \underline{78} \\ 13 \\ \underline{13} \\ 0 \end{array}$$

$$\begin{array}{r} 0126 \\ 17 \overline{) 2142} \\ \underline{17} \\ 44 \\ \underline{34} \\ 102 \\ \underline{102} \\ 0 \end{array}$$

17
34
51
68
85
102

If dividing by 13 (or a higher number) the children would quickly write down the multiples of that number: 13, 26, 39 etc to help them work out the answer.