

Addition

Y3

- Continue with partitioned columnar method.
- Introduce expanded columnar addition.

H T O

	2	3	6
+		7	3
			9
	1	0	0
	2	0	0
			9
	3	0	9

Progressing to the compact columnar method.

TO	HTO	TO	HTO	TO	HTO
23	315	94	561	47	237
+ 42	+ 624	+ 73	+ 718	+ 25	+ 516
<u>65</u>	<u>939</u>	<u>167</u>	<u>1279</u>	<u>72</u>	<u>753</u>
				1	1

- Add money using both £ and pence in practical contexts.

National Curriculum requirements:

Add numbers with up to 3 digits, using the formal written method of columnar addition.

Subtraction

Y3

- Continue with vertical number line subtraction progressing to the expanded columnar subtraction method.

$$89 - 35 = 54$$

$$80 - 9$$

$$- 30 - 5$$

$$50 - 4 = 54$$

- Introduce exchanging through the expanded columnar subtraction method.

72 - 47



$$70 - 2$$

$$- 40 - 7$$

$$20 - 5 = 25$$

- Progressing on to compact columnar subtraction.

TO	HTO	TO
47	864	451
- 23	- 621	- 36
<u>24</u>	<u>243</u>	<u>15</u>

- Emphasise value of digit, e.g. 4 tens subtract 2 tens = 2 tens. Use the correct language for subtraction i.e. exchange rather than borrow.
- Subtract amounts of money to give change.

National Curriculum requirements:

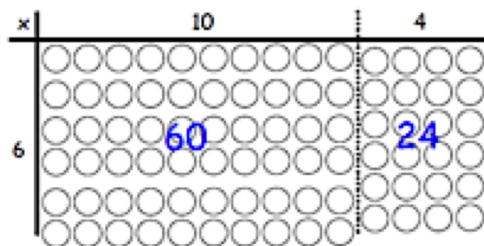
Subtract numbers with up to 3 digits using the formal written method of columnar subtraction.

Multiplication

Y3

- Recall and use multiplication tables for 3, 4 and 8.
- Continue to use arrays and number lines/Cuisenaire rods for 3, 4 and 8 multiplication tables.
- Write and calculate mathematical statements for multiplication. Statements to include the multiplication tables that they know and 2 digit numbers \times 1 digit numbers. Pupils use mental methods and progress to formal written methods.
- Introduce grid model.

$$\begin{array}{r|rr} \times & 10 & 4 \\ 6 & 60 & 24 \\ \hline & 84 & \end{array}$$



- Progressing to expanded method of multiplication.

$$\begin{array}{r} \text{T O} \\ 14 \\ \times \quad 5 \\ \hline 20 \text{ (5} \times 4\text{)} \\ + 50 \text{ (5} \times 10\text{)} \\ \hline 70 \end{array}$$

National Curriculum requirements: Multiply 2 digits by 1 digit, using mental and progressing to formal written methods.

Division

Y3

- Recall and use division facts for 3, 4, and 8 times tables.
- Continue with repeated subtraction on a vertical number line.
- Write and calculate mathematical statements for division using the tables they know.
- Introduce grouping method before short division, encourage children to estimate answers before attempting calculation. Create fact box to encourage efficient grouping e.g. not always groups of 10 - 1x, 2x, 5x, 10x, 20x, 50x, 100x.

$$\begin{array}{r} 13 \\ 5 \overline{) 65} \\ \underline{- 50} \text{ (5} \times 10\text{)} \\ 15 \\ \underline{- 15} \text{ (5} \times 3\text{)} \\ 0 \end{array}$$

- Introduce short division, with exact answers.

$$\begin{array}{r} 32 \\ 3 \overline{) 96} \end{array}$$

- Progressing to short division involving carrying, with exact answers.

National Curriculum requirements:

Division questions based on multiplication tables they know.

Divide 2 digits by 1 digit, progressing to formal written methods.

The National Curriculum statutory requirements for Year 3 and the use of written methods are not clear therefore our guidance for Year 3 has been based on the skills required to access Year 4 statutory requirements.