

Year 4—Written calculation strategies

ADDITION

- Put each digit in a square.
- Use the correct columns.
- Up to 4 digit numbers



Compact Column:

- Formal method with or without exchanging in 100s, 10s and 1s
- Strike through carry once included in answer.

$$\begin{array}{r} 2767 \\ + 2485 \\ \hline 5252 \end{array}$$

1 1 1

$$\begin{array}{r} 2341 \\ + 942 \\ \hline 3283 \end{array}$$

$$\begin{array}{r} 84 \\ 3367 \\ \hline 3451 \end{array}$$

1 1

- Use these methods to add decimals to decimal places in a practical context e.g. money



SUBTRACTION

- Put each digit in a square.
- Use the correct columns.
- Up to 4 digit numbers



Column Involving exchanging:

$$\begin{array}{r} 3812 \\ - 67 \\ \hline 325 \end{array}$$



$$\begin{array}{r} 6712 \\ - 468 \\ \hline 6234 \end{array}$$

- Use these methods to subtract decimals to decimal places in a practical context e.g. money

$$£ 25.146$$

$$£ 11.80$$

$$£ 13.66$$

MULTIPLICATION

- Put each digit in a square.
- Use the correct columns.
- 2 or 3 digit by 1 digit numbers



Expanded column method (revision of Year 3)

Tens	Ones
20	4
10	6
8	0
9	6

$$\begin{array}{r} 24 \\ \times 4 \\ \hline 16 \\ 80 \\ \hline 96 \end{array}$$

(4 x 4) (4 x 20)

Short formal method (with place value chart/equipment)

T	O
10 10	1 1 1 1
10 10	1 1 1 1
10 10	1 1 1 1
10 10	1 1 1 1

T	O
2	4
9	6
1	

Hundreds	Tens	Ones
100 100	10	1 1 1
100 100	10	1 1 1
100 100	10	1 1 1

H	T	O
2	1	3
9	6	3

Moving to without equipment

$$\begin{array}{r} 546 \\ \times 3 \\ \hline 1638 \end{array}$$



DIVISION

- Put each digit in a square.
- 2 or 3 digit by 1 or 2 digit numbers



Short division

$$\begin{array}{r} 26 \\ 3 \overline{) 518} \end{array}$$

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

$$\begin{array}{r} 039 \\ 4 \overline{) 11536} \end{array}$$

$$\begin{array}{r} 07r9 \\ 12 \overline{) 993} \end{array}$$

