Year 5– Number facts you can support your child to learn at home.

Counting:

- **Count fluently on/back in steps of powers of 10 from any given number.**

Original Number	10 more	100 more	1,000 more	10,000 more	100,000 more
37	47		1,037	10,037	
490		590		10,490	100,490
1,365	1,375		2,365		

Addition and Subtraction:

- **Apply place-value knowledge to known additive number facts (scaling facts by 100)**

$8+6=14$ and $14-6=8$

so

$800+600=1{,}400$ and $1{,}400-600=800$

$8+6=14$ $\quad$ $14-6=8$ $\quad$ $14-8=6$

$0.8+0.6=1.4$ $\quad$ $1.4-0.6=0.8$ $\quad$ $1.4-0.8=0.6$

Multiplication and Division:

- **Secure fluency of multiplication and division facts up to 12 x 12. Specific focus on the 36 facts needed for formal multiplication. (shaded)**

1 × 1	1 × 2	1 × 3	1 × 4	1 × 5	1 × 6	1 × 7	1 × 8	1 × 9	1 × 10	1 × 11	1 × 12
2 × 1	2 × 2	2 × 3	2 × 4	2 × 5	2 × 6	2 × 7	2 × 8	2 × 9	2 × 10	2 × 11	2 × 12
3 × 1	3 × 2	3 × 3	3 × 4	3 × 5	3 × 6	3 × 7	3 × 8	3 × 9	3 × 10	3 × 11	3 × 12
4 × 1	4 × 2	4 × 3	4 × 4	4 × 5	4 × 6	4 × 7	4 × 8	4 × 9	4 × 10	4 × 11	4 × 12
5 × 1	5 × 2	5 × 3	5 × 4	5 × 5	5 × 6	5 × 7	5 × 8	5 × 9	5 × 10	5 × 11	5 × 12
6 × 1	6 × 2	6 × 3	6 × 4	6 × 5	6 × 6	6 × 7	6 × 8	6 × 9	6 × 10	6 × 11	6 × 12
7 × 1	7 × 2	7 × 3	7 × 4	7 × 5	7 × 6	7 × 7	7 × 8	7 × 9	7 × 10	7 × 11	7 × 12
8 × 1	8 × 2	8 × 3	8 × 4	8 × 5	8 × 6	8 × 7	8 × 8	8 × 9	8 × 10	8 × 11	8 × 12
9 × 1	9 × 2	9 × 3	9 × 4	9 × 5	9 × 6	9 × 7	9 × 8	9 × 9	9 × 10	9 × 11	9 × 12
10 × 1	10 × 2	10 × 3	10 × 4	10 × 5	10 × 6	10 × 7	10 × 8	10 × 9	10 × 10	10 × 11	10 × 12
11 × 1	11 × 2	11 × 3	11 × 4	11 × 5	11 × 6	11 × 7	11 × 8	11 × 9	11 × 10	11 × 11	11 × 12
12 × 1	12 × 2	12 × 3	12 × 4	12 × 5	12 × 6	12 × 7	12 × 8	12 × 9	12 × 10	12 × 11	12 × 12

- **Multiply and divide numbers and decimals using known facts (scaling),**

$3 \times 4 = 12$ and $12 \div 4 = 3$

so

$300 \times 4 = 1{,}200$ and $1{,}200 \div 4 = 300$

$3 \times 4 = 12$

$0.3 \times 4 = 1.2$

$0.03 \times 4 = 0.12$

- **Multiply and divide numbers/decimals by 10, 100 and 1000.**

H	T	O	Tth	Hth
		4	0	5

4.05 × 100

Multiplying

X 10 digits move LEFT **1** space
X 100 digits move LEFT **2** spaces
X 1000 digits move LEFT **3** spaces

Dividing

÷ 10 digits move RIGHT **1** space
÷ 100 digits move RIGHT **2** spaces
÷ 1000 digits move RIGHT **3** spaces

How to help at home

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1. Dice with decimals

Make '×' '÷' and '10', '100', '1000' cards to place face down in two piles. Roll a dice four times to create a number (e.g. 4258), then insert a decimal point somewhere (e.g. 42.58). Take a card from each pile and do the calculation (e.g. 42.58 ÷ 100 = 0.4258).

2. Play Battleship games

Play Battleships by drawing ships on coordinate grids. Try to sink each other's ships by guessing their positions using coordinates, such as (1,2). Remember that the first number in the coordinate bracket is on the horizontal *x*-axis. The second number is on the vertical *y*-axis.

3. Hit the sales

Sales in shops, catalogues or online are great for working with percentages. For example, in a 20% off sale, if the full price (that is 100%) of an item is £10, how much is the item discounted by (£2) and what will the sale price be (£8)?