



Multiplication and Division

Y3

Knowledge

- Multiply by 3
- Divide by 3
- The 3 times table
- Multiply by 4
- Divide by 4
- The 4 times table
- Multiply by 8
- Divide by 8
- Related calculations

Skills

- Multiplication – equal groups
- Comparing statements
- Multiply 2-digits by 1-digit
- Divide 2-digits by 1-digit
- Scaling

Vocabulary

Times table, multiply by, divide by, array, fact families, regrouping, groups, partition, recombine, area model

Multiplication Methods

Method 1 Area Model	Method 2 Partition and Recombine	Method 3 Column Multiplication
$36 \times 3 = 108$ 	$3 \times 23 = 69$ 	$36 \times 4 = 144$ $34 \times 5 = 170$

Key Multiplication Facts

3 x Tables

1 x 3 = 3	3 + 3 = 1
2 x 3 = 6	6 + 3 = 2
3 x 3 = 9	9 + 3 = 3
4 x 3 = 12	12 + 3 = 4
5 x 3 = 15	15 + 3 = 5
6 x 3 = 18	18 + 3 = 6
7 x 3 = 21	21 + 3 = 7
8 x 3 = 24	24 + 3 = 8
9 x 3 = 27	27 + 3 = 9
10 x 3 = 30	30 + 3 = 10
11 x 3 = 33	33 + 3 = 11
12 x 3 = 36	36 + 3 = 12

4 x Tables

1 x 4 = 4	4 + 4 = 1
2 x 4 = 8	8 + 4 = 2
3 x 4 = 12	12 + 4 = 3
4 x 4 = 16	16 + 4 = 4
5 x 4 = 20	20 + 4 = 5
6 x 4 = 24	24 + 4 = 6
7 x 4 = 28	28 + 4 = 7
8 x 4 = 32	32 + 4 = 8
9 x 4 = 36	36 + 4 = 9
10 x 4 = 40	40 + 4 = 10
11 x 4 = 44	44 + 4 = 11
12 x 4 = 48	48 + 4 = 12

8 x Tables

1 x 8 = 8	8 + 8 = 1
2 x 8 = 16	16 + 8 = 2
3 x 8 = 24	24 + 8 = 3
4 x 8 = 32	32 + 8 = 4
5 x 8 = 40	40 + 8 = 5
6 x 8 = 48	48 + 8 = 6
7 x 8 = 56	56 + 8 = 7
8 x 8 = 64	64 + 8 = 8
9 x 8 = 72	72 + 8 = 9
10 x 8 = 80	80 + 8 = 10
11 x 8 = 88	88 + 8 = 11
12 x 8 = 96	96 + 8 = 12

Inspirational Mathematician Sophie Germain (1776-1831)

Sophie Germain was a French mathematician. Due to the unfair gender restrictions at the time, she was not able to study a career in the subject, but that did not stop her. She worked on it independently throughout her life and through her hard work, she advanced the field of number theory.



Division Methods

Method 1 Partitioning	Method 2 Area Model
$66 \div 3 = 22$ 	$6 \div 2 = 3$