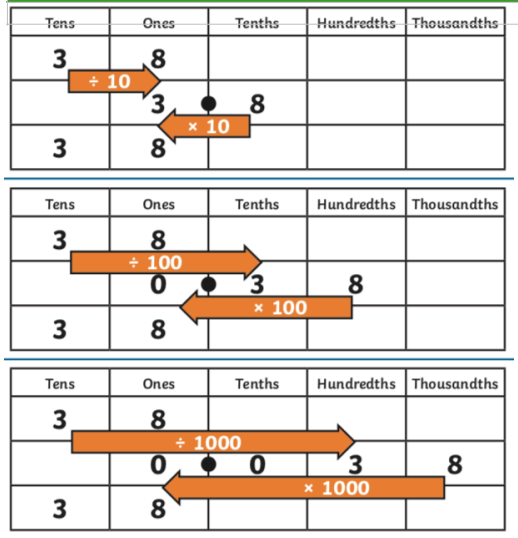
Multiplication and Division A

Key vocabulary

Factor	a number that 'fits' into another number equally
Multiple	a number 'made' in certain times table
Prime	a number with only 2 factors - 1 and itself
Square number	a number produced by multiplying it by itself
Cubed number	a number produced by multiplying it by itself twice
Common factor	A factor that is shared by at least 2 numbers
Common multiple	A number that appears in at least 2 times tables
Root	e.g. square root, the number that is multiplied by itself to get the number
Power	How many times a number has to be multiplied by itself e.g. $5 = 5 \times 5 \times 5 \times 5$

Multiplying and Dividing Decimals by 10,100 and 1000



When multiplying decimals you need to follow ones key rule

- *The decimal point does not move*

When multiplying all of the digits move to the left.

- *By 10 - move one place value column to the left*
- *By 100 - move two places value columns to the left*
- *By 1000 - move three places value columns to the left*

When dividing all of the digits move to the right:

- *By 10 - move one place value column to the right*
- *By 100 - move two places value columns to the right*

Square Numbers

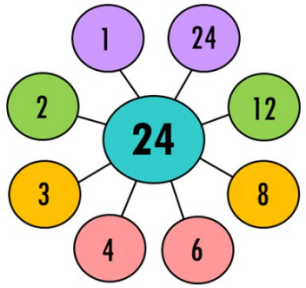
1^2	1
2^2	4
3^2	9
4^2	16
5^2	25
6^2	36
7^2	49
8^2	64
9^2	81
10^2	100
11^2	121
12^2	144

Cubed Numbers

1^3	1
2^3	8
3^3	27
4^3	64
5^3	125
6^3	216
7^3	343
8^3	512
9^3	729
10^3	1000
11^3	1331
12^3	1728

Factors

A factor is a number that divides into another number evenly without a remainder.



Common Factors

Factors of **12**: 1, 2, 3, 4, 6, 12

Factors of **36**: 1, 2, 3, 4, 6, 9, 12, 18, 36

Factors of **60**: 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60

Common factors of **12**, **36** and **60**: 1, 2, 3, 4, 6, 12

Multiples

Multiples are the result of multiplying a number by an integer.



Prime Numbers

2	3	5	7	11	13	17	19
23	29	31	37	41	43	47	53
59	61	67	71	73	83	89	97

Common Multiples

