

Topics

- Factors
- Multiples
- Prime numbers
- HCF/LCM

What do I need to be able to do?

- To understand the difference between a factor and a multiple
- To know why a number is prime
- To be able to find the HCF and LCM of a set of numbers
- To use prime factorisation

NUMBER

Autumn Term

Number 3

Key Vocabulary

Factor	Numbers that we can multiply together to get another number
Multiple	The result of multiplying a number by an integer
Prime	A whole number, greater than 1, that only has 2 factors, 1 and itself
Highest common factor	The greatest number that is a factor of 2 (or more) other numbers
Lowest common multiple	The smallest positive number that is a multiple of two or more numbers
Product	The answer when two or more values are multiplied together
Factorisation	Writing a number as a product of two or more smaller numbers

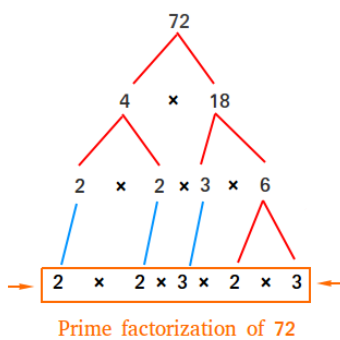
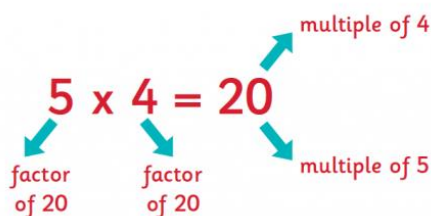
Career Links

Being able to confidently work with numbers is a great skill to have and has lots of links with a number of careers such as:

- Accountancy
- Banking
- Insurance
- Chef
- Construction
- Hairdressing

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Prime numbers



Prime factorisation

Definition

Characteristics

Examples

Non-Examples

Year 7 – Knowledge Organiser



Topics

- Area and perimeter of basic shapes

What do I need to be able to do?

- Be able to find the perimeter of different shapes
- Be able to find the area of different shapes

SHAPE

Autumn Term

Shape 1

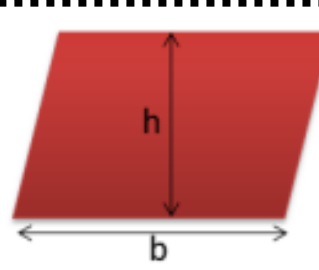
Key Vocabulary

Area	The size of a surface
Perimeter	The distance around the outside of a surface
Triangle	A 3 sided flat shape with straight sides
Square	A flat shape with 4 straight sides of equal length and interior angles of 90°
Parallelogram	A flat shape with 4 straight sides where the opposite sides are parallel
Trapezium	A flat 4 sided shape with one pair of parallel sides opposite each other
Dimensions	A measurable extent of a particular kind, such as length, breadth, depth, or height
Height	The measurement of something from base to top
Length	The measurement of something from end to end
Base	The lowest part or edge of something, the part on which it rests or is supported

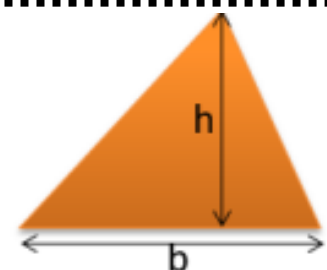
Career Links

Being able to confidently work with shapes is a great skill to have and has lots of links with a number of careers such as:

- Construction
- Game design
- Welder
- Architecture
- Engineering



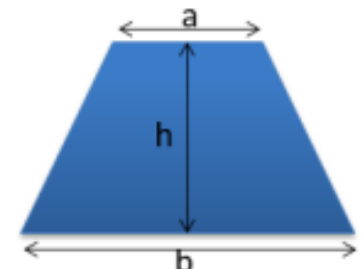
$$A = b \times h$$



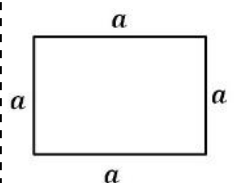
$$A = \frac{b \times h}{2}$$



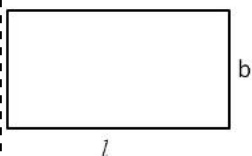
$$A = l \times w$$



$$A = \frac{(a + b) \times h}{2}$$



$$\begin{aligned} \text{Perimeter} &= a + a + a + a \\ &= 4a \end{aligned}$$



$$\begin{aligned} \text{Perimeter} &= l + b + l + b \\ &= 2l + 2b \\ &= 2(l + b) \end{aligned}$$

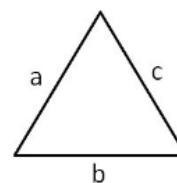
Definition

Characteristics

Word

Examples

Non-Examples



$$\text{Perimeter} = a + b + c$$

Year 7 –
Knowledge
Organiser

