Multiplication and division vocabulary

Term	Definition	Example
Factor pairs	a pair of numbers that divides exactly into another number	factors pairs of 12 = 1x 12 2x6 3x4
multiple	a number in another number's times table	multiples of 9 = 9, 18, 27, 36…
Negative	Numbers below 0	**-5, -4, -3, -2, -1,** 0, 1, 2, 3
multiply by 0	A number x by 0 = 0	7 x 0 = 0 0 x18 = 0
X and ÷ by 1	When x and ÷ by 1 a number stays the same	8÷1 = 8 12 x 1 = 12

Roman numerals

1	I	100	C
5	V	50	L
10	X		

Measurement conversions

Month	Days
January	31
February	28 (29 in leap year)
March	31
April	30
May	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31

1 year = 365 days (≈ 52 weeks)
Leap year = 366 days

Length	
10mm	1cm
100cm	1 meter (m)
1000m	1 kilometre (km)
Mass	
1000g	1kilogram (kg)
Liquid	
1000ml	1Litre (L)
Money	
100p	£1

Co-ordinates

Read co-ordinates along the x axis (horizontal) first, then the y axis (vertical). E.g. (3,4) = go right 3, up 4.

Time

60 Seconds	1 minute
60 minutes	1 hour
24 hours	1 day
7 days	1 week
Noon	Midday- 12pm 12:00pm or 12:00
Mid**night**	12am or 00:00
Long hand	Tells us the minute
Short hand	Tells us the hour
am	morning
pm	afternoon

It's ... o'clock
It's five to...   It's five past...
It's ten to...   It's ten past...
It's quarter to...   It's quarter past ...
It's twenty to...   It's twenty past ...
It's twenty-five to...   It's twenty-five past ...
It's half past ...
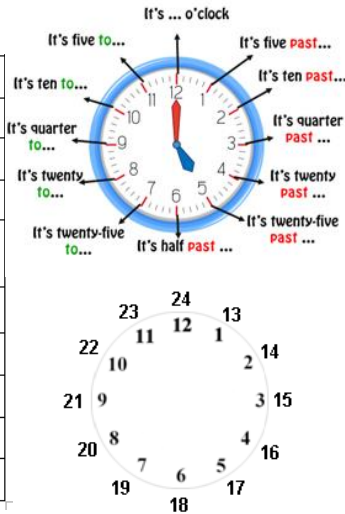
2D shapes

Name	No. of sides
quadrilateral	4
pentagon	5
hexagon	6
heptagon	7
octagon	8
nonagon	9
decagon	10

polygon = shape with straight sides
regular = all sides/angles the same
irregular = sides/angles **not** same

Types of triangle

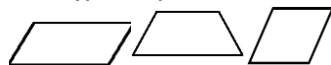scalene   equilateral   isosceles
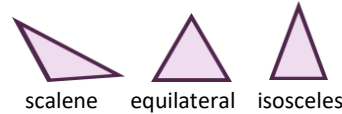
Scalene= all angles and sides are different sizes
Equilateral= all angles and sides are the same size
Isosceles= 2 angles and sides are the same size, one is different
Right angled triangle= one of the angles meets at 90°
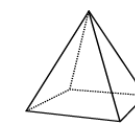
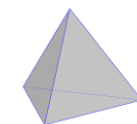### Types of quadrilateral

parallelogram   trapezium   rhombus

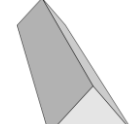2 sets of Parallel lines   1 set of Parallel lines   four equal sides

3D shapes

	square-based pyramid	triangular-based pyramid	triangular prism
faces (the flat sides)	5	4	5
edges	8	6	9
vertices (the points where the edges meet)	5	4	6

Shape vocabulary

horizontal line   parallel lines

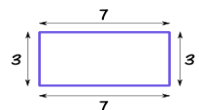vertical line   perpendicular lines (at right angles)

Area and Perimeter

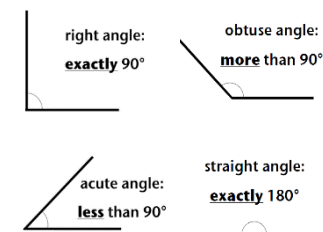**Area-** the amount of space inside a shape measured in cm² or m² (count squares)
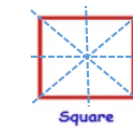
Area = 8 cm²

Perimeter- the distance around a shape measured in mm, cm, m or km 7+3+7+3= 10cm
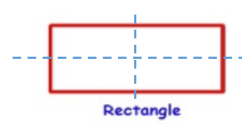
Angles

right angle: **exactly** 90°
obtuse angle: **more** than 90°
acute angle: **less** than 90°
straight angle: **exactly** 180°

Symmetry
When a shape is split so it is identical (the same) on both sides

Square
4 lines of symmetry

Rectangle
2 lines of symmetry

Parallelogram
No lines of symmetry

Equilateral Triangle
3 lines of symmetry

YEAR 4 MATHS KNOWLEDGE ORGANISER