

## Multiplication and division vocabulary

Term	Definition	Example
factor	a number that divides exactly into another number	factors of 12 = 1, 2, 3, 4, 6, 12
common factor	factors of two numbers that are the same	common factors of 8 and 12 = 1, 2, 4
product	result of two factors multiplied against each other	$3 \times 5 = 15$
multiple	a number in another number's times table	multiples of 9 = 9, 18, 27, 36...

## Roman numerals

1	I	50	L
5	V	100	C
10	X		

# YEAR 4 MATHS KNOWLEDGE ORGANISER

## Measurement conversions

Month	Days
January	31
February	28 (29 in leap year)
March	31
June	30
July	31
August	31
September	30
October	31
November	30
December	31
1 year = 365 days ( $\approx$ 52 weeks)	
Leap year = 366 days	

1 centimetre	10mm
1 metre	100cm
1 kilometre	1,000 m
1 kilogram	1,000 grams
1 litre	1,000 millilitres

## Co-ordinates

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

Numerator

Denominator

Equivalent

Fraction





Part

Whole

Equal

## decimals

$\frac{1}{20}$	0.05	$\div 20$
$\frac{1}{10}$	0.1	$\div 10$
$\frac{1}{5}$	0.2	$\div 5$
$\frac{1}{4}$	0.25	$\div 4$
$\frac{1}{2}$	0.5	$\div 2$
$\frac{3}{4}$	0.75	$\div 4, \times 3$
1	1	$\div 1$
Equivalent fractions		
$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{12}$
$\frac{1}{3}$	$\frac{2}{6}$	$\frac{3}{9}$
$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{6}$
$\frac{3}{4}$	$\frac{6}{8}$	$\frac{9}{12}$
$\frac{1}{5}$	$\frac{2}{10}$	$\frac{3}{15}$

 <p>Acute angle</p> <p>An angle which measures more than <math>0^\circ</math>, but less than <math>90^\circ</math>.</p>	 <p>Right angle</p> <p>An angle which measures exactly <math>90^\circ</math>.</p>
 <p>Obtuse angle</p> <p>An angle which measures more than <math>90^\circ</math>, but less than <math>180^\circ</math>.</p>	 <p>Straight angle</p> <p>An angle which measures exactly <math>180^\circ</math>.</p>

## 2D shapes

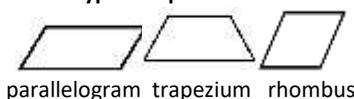
Name	No. of sides
triangle	3
quadrilateral	4
pentagon	5
hexagon	6
heptagon	7
octagon	8
nonagon	9
decagon	10

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

## Types of triangle



## Types of quadrilateral



## PERIMETER

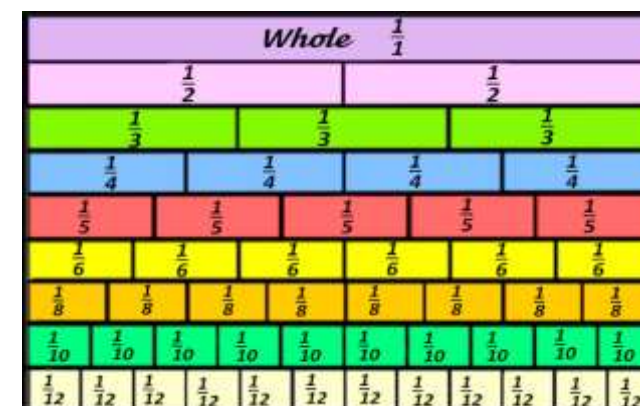
Is the total distance around a shape.

## AREA

Is the amount of space inside a 2D shape usually measured in  $\text{cm}^2$  or  $\text{m}^2$ .

## 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



oid = height