

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



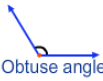

1 year = 365 days (\approx 52 weeks)
Leap year = 366 days

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.

Angles

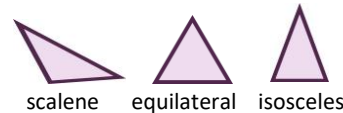
 <p>Acute angle</p> <p>An angle which measures more than 0°, but less than 90°.</p>	 <p>Right angle</p> <p>An angle which measures exactly 90°.</p>
 <p>Obtuse angle</p> <p>An angle which measures more than 90°, but less than 180°.</p>	 <p>Straight angle</p> <p>An angle which measures exactly 180°.</p>

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 cm^2 or m^2 .

3D shapes





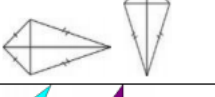

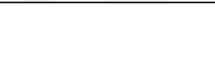
	 square-based pyramid	 triangular-based pyramid	 triangular prism
faces (the flat sides)	5	4	5
edges	8	6	9
vertices (the points where the edges meet)	5	4	6

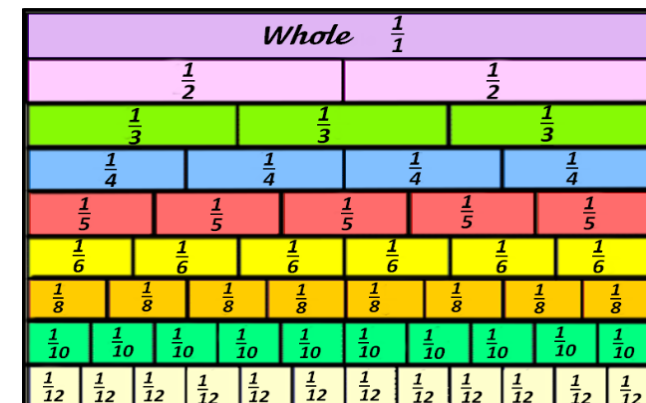
Fractions & decimals

$\frac{1}{20}$	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

$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{12}$
$\frac{1}{3}$	$\frac{2}{6}$	$\frac{3}{9}$
$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{6}$
$\frac{3}{4}$	$\frac{6}{8}$	$\frac{9}{12}$
$\frac{1}{5}$	$\frac{2}{10}$	$\frac{3}{15}$

trapezium	
parallelogram	
rhombus	
rectangles	
kite	
arrowhead	
irregular quadrilaterals	



Numerator

Denominator

Equivalent

Fraction

Part

Whole

Equal