

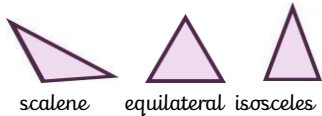
2D shapes

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

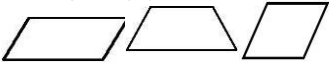
Regular = all sides/angles the same

Irregular = sides/angles not same

Types of triangle



Types of quadrilateral



Parallelogram Trapezium Rhombus
AREA

is the amount of space inside a 2D shape usually measured in cm^2 or m^2 .

Area of a triangle

$$= (\text{base} \times \text{height}) \div 2$$

Area of a parallelogram

$$= \text{base} \times \text{height}$$

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
prime number	a number with only 2 factors: 1 and itself	2, 3, 5, 7, 11, 13, 17, 19...
prime factor	a factor that is prime	prime factors of 12 = 2, 3
multiple	a number in another number's times table	multiples of 9 = 9, 18, 27, 36...
common multiple	multiples of two numbers that are the same	common multiples of 4 and 6 = 12, 24...
square numbers	the result when a number has been multiplied by itself	25 ($5^2 = 5 \times 5$) 49 ($7^2 = 7 \times 7$)
cube numbers	the result when a number has been multiplied by itself 3 times	8 ($2^3 = 2 \times 2 \times 2$) 27 ($3^3 = 3 \times 3 \times 3$)

Shape vocabulary

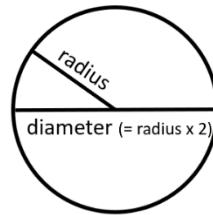
Perimeter = measure around the edge of a

horizontal line

parallel lines

vertical line

perpendicular lines
(at right angles)



Circumference = perimeter of a circle

Year Five Maths Knowledge Organiser

Measurement conversions

1 centimetre	10mm
1 metre	100cm
1 kilometre	1,000 m
1 mile	1.6 km
8 kilometre	5 miles
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.

Fractions

Improper and Mixed Number

$$\frac{11}{7} = 1 \frac{4}{7}$$

Fractions, decimals & percentages

$\frac{1}{100}$	0.01	1%
$\frac{1}{20}$	0.05	5%
$\frac{1}{10}$	0.1	10%
$\frac{1}{8}$	0.125	12.5%
$\frac{1}{5}$	0.2	20%
$\frac{1}{4}$	0.25	25%
$\frac{1}{3}$	0.33	33%
$\frac{2}{5}$	0.4	40%
$\frac{1}{2}$	0.5	50%
$\frac{3}{4}$	0.75	75%
1	1	100%

Roman numerals

Roman numerals

5	V	500	D
10	X	1000	M
50	L	Remember - No more than 3 in a row!	

Decimal Place Value

Ones	•	Tenths	Hundredths	Thousandths
1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	•	1	2	9
"two"	point	one	two	nine"

Thirty days hath September, April, June, and November, all the rest have **thirty-one** except February which has 28.

Angles: Full turn = 360° Half turn = 180° Right angle = 90° acute angle = $<90^\circ$ obtuse angle = $>90^\circ$ reflex angle = $>180^\circ$ angles on a straight line = 180° opposite angles = same angles in a triangle = 180° angles in a quadrilateral = 360°