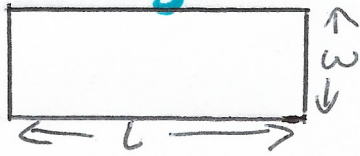


# AREA

Area is the amount of space a 2D shape occupies  
You will need to learn these formulae

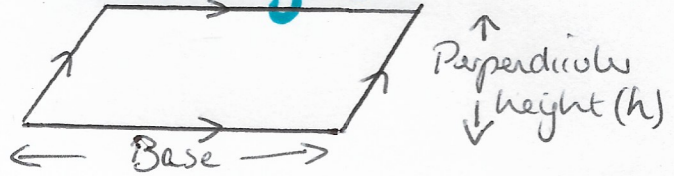
## Rectangle



$$\text{Area} = L \times w$$

length  $\times$  width

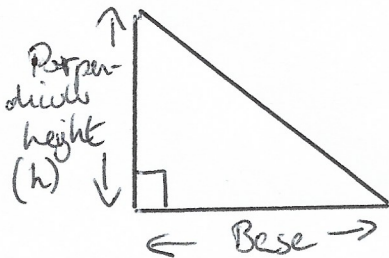
## Parallelogram



$$\text{Area} = b \times h$$

base  $\times$  perpendicular height

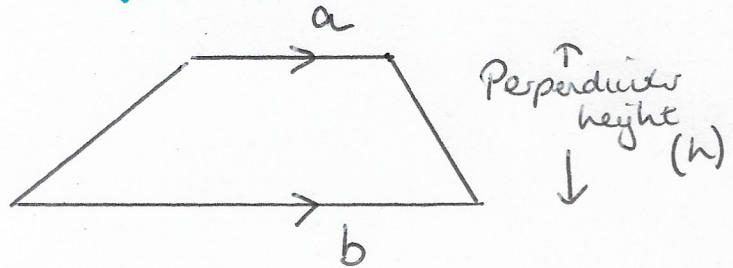
## Triangle



$$\text{Area} = \frac{1}{2} \times b \times h$$

$\frac{1}{2} \times$  base  $\times$  perpendicular height

## Trapezium



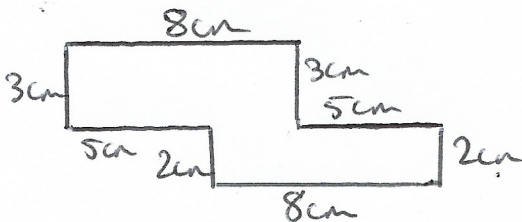
$$\text{Area} = \frac{1}{2} \times (a + b) \times h$$

Area =  $\frac{1}{2}$  sum of parallel sides  $\times$  perpendicular height between them

Units of Area are  $\text{mm}^2$   $\text{cm}^2$  &  $\text{m}^2$

## Perimeter

Perimeter is the distance round the outside of a shape



$$P = 8 + 3 + 5 + 2 + 8 + 2 + 5 + 3 = 36\text{cm}$$

Units of Perimeter are mm cm m

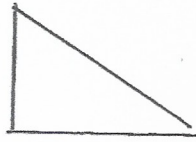
# POLYGONS

A Polygon is a multisided 2D Shape

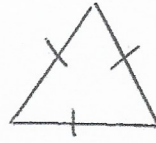
**TRIANGLE** - 3 sided - Sum of angles =  $180^\circ$



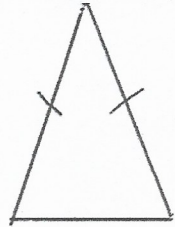
Scalene



Right Angled

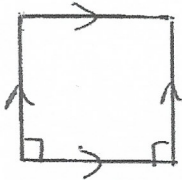


Equilateral



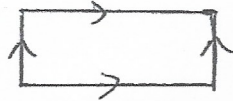
Isosceles

**QUADRILATERALS** - 4 sided - Sum of angles =  $360^\circ$



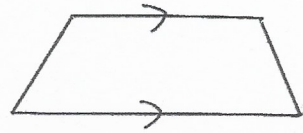
Square

All sides equal length  
2 pairs of parallel lines  
4 right angles



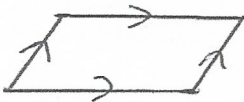
Rectangle

Opposite sides equal length  
2 pairs of parallel lines  
4 right angles



Trapezium

1 pair of parallel lines  
No right angles



Parallelogram

Opposite equal lengths  
2 pairs of parallel lines



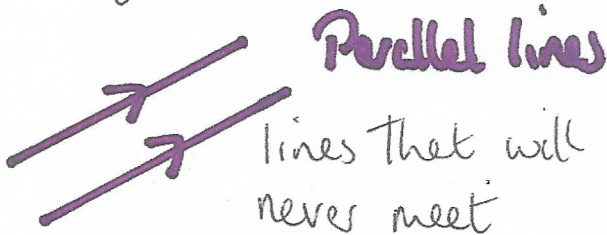
Rhombus

All sides equal lengths  
2 pairs of parallel lines



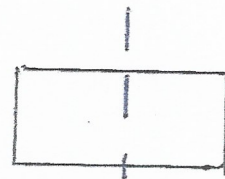
Kite

2 pairs of lines of equal length  
no parallel lines



Parallel lines

lines that will never meet



**Line of Symmetry**  
when one side of a shape can be reflected to the other side