## wjec cbac

## The vocabulary of geometry

Triangles and quadrilaterals

## Check that you can:

recognise when a shape is a triangle
recognise when a shape is a quadrilateral understand symmetry in 2-D shapes.

## Types of triangle

You need to know and memorise the special names and properties of four types of triangle.

## Equilateral triangles

All equilateral triangles have:

- three equal sides
three equal angles, each measuring $60^{\circ}$ three lines of symmetry.


These dashes indicate that the sides are of equal length

## Isosceles triangles

All isosceles triangles have:

- two equal sides
- two equal angles
one line of symmetry



## Remember!

A shape has line symmetry if one half of a shape is a mirror image of the other half of the shape. The line that divides the two halves of a symmetrical shape is called the line of symmetry (or mirror line).

## Scalene triangles

All scalene triangles have:

- three sides, each of a different length
- three angles, each of a different size
- no lines of symmetry.



## Acute-angled triangles

All acute-angled triangles have three acute angles.


## Right-angled triangles

All right-angled triangles have:

- one right-angle
- two acute angles.



## Obtuse-angled triangle

All obtuse-angled triangles have:
one obtuse angle

- two acute angles



## Types of quadrilateral

All quadrilaterals have four sides. You need to know and memorise the names and properties of six special types of quadrilateral.

## Squares

All squares have six properties:
4 equal sides 2 pairs of parallel sides 4 equal angles of $90^{\circ} \quad 4$ lines of symmetry


Diagonals connect opposite vertices.
These diagonals cut each other in half (bisect) and make a $90^{\circ}$ angle where they cross

## Rectangles

All rectangles have six properties:

2 pairs of equal sides
4 equal angles of $90^{\circ}$
2 pairs of parallel sides 2 lines of symmetry


## Rhombuses

All rhombuses have five properties:
$\begin{array}{ll}4 \text { equal sides } & 2 \text { pairs of parallel sides } \\ 2 \text { pairs of equal angles } & \text { No lines of symmetry }\end{array}$
2 pairs of equal angles No lines of symmetry

Equal length diagonals Diagonals bisect each other




## Parallelograms

All parallelograms have five properties:

$$
\begin{array}{ll}
2 \text { pairs of equal sides } & 2 \text { pairs of parallel sides } \\
2 \text { pairs of equal angles } & \text { No lines of symmetry }
\end{array}
$$ 2 pairs of equal angles No lines of symmetry

Diagonals bisect each other


## Kites

All kites have five properties:

2 pairs of equal sides
1 pair of equal angles


No pairs of parallel sides 1 line of symmetry



## Trapeziums

All trapeziums have one property:

$$
1 \text { pair of parallel sides }
$$



