## Angles

Angles can be described as or found:
On a straight line

In a triangle


Angles total
On a straight line
$180^{\circ}$

In a quadrilateral


Round a central point


Where parallel lines are crossed by another line.

This creates

- vertically opposite angles
- corresponding angles
- alternate angles
- co-interior

Exterior of a triangle


Total $180^{\circ}$ wherever two angles are paired together on one line ( $\mathrm{a} \& \mathrm{~b}$ and co-interior)
The same when they are in the same position but not paired on one line (a \& a or b \& b )


Add together the opposite interior angles $\mathrm{a}+\mathrm{b}=\mathrm{d}$
$90^{\circ}$

## with a square in the corner

Defined by two straight lines. Often marked


Acute

Obtuse
$90^{\circ}<$ angle $<180^{\circ}$

## Shape types \& Triangles

Shape typesQuadrilateral Flat shape with four straight edges (these ..... $360^{\circ}$ sometimes intersect)
Parallelogram A quadrilateral with two sets of parallel sides ..... $360^{\circ}$Opposite sides are of equal length.Triangle
Equilateral: all sides and angles the same ..... $180^{\circ}$
Isosceles: two sides and two angles the same ..... $180^{\circ}$
Scalene: all sides and all angles are different ..... $180^{\circ}$
Right-angled: one angle of $90^{\circ}$ ..... $180^{\circ}$Angles total

