Knowledge Organiser - Maths
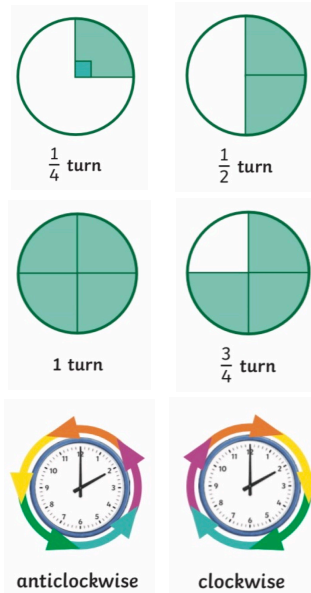
Key Facts - Angles

An angle is created when two straight lines meet at a point or intersect.

There are six types of angles;

Type of Angle	Description	Example
Acute Angle	An angle that is less than 90°	46°
Right Angle	An angle that is exactly 90°	90°
Obtuse Angle	An angle that is greater than 90° and less than 180°	130°
Straight Angle	An angle that is exactly 180°	180°
Reflex Angle	An angle that is greater than 180° and less than 360°	308°
Full Angle	An angle that is exactly 360°	360°

Angles can also be used as a description of a turn.

$\frac{1}{4}$ turn $\frac{1}{2}$ turn

1 turn $\frac{3}{4}$ turn

anticlockwise   clockwise

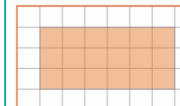## Key Facts - Area and Perimeter

Perimeter is the total distance around the outside of a 2D shape.

Area is the amount of space inside a 2D shape.
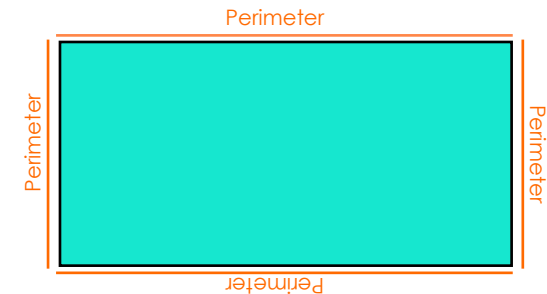
Perimeter

Area of Rectangles
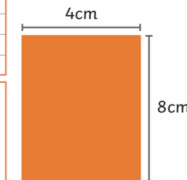
length × width = area of a rectangle

Counting squares:
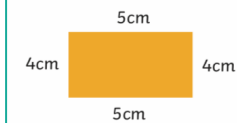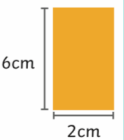area = 18cm²
Use formula:
6cm × 3cm
area = 18cm²

4cm
8cm
8cm × 4cm area = 32cm²

Perimeter of Rectangles

perimeter = length + width + length + width or (length + width) × 2

5cm
4cm   4cm
5cm

5cm + 4cm + 5cm + 4cm
area = 18cm²

6cm
2cm
(6 + 2) × 2
area = 16cm²

Key Facts - Lines

Perpendicular	Parallel	Vertical	Horizontal
Lines that meet at a right angle (90°)	Lines that will never meet and are always the same distance apart.	Straight line up and down	Straight line left and right

Key Vocabulary

angle	an angle is created when two straight lines meet at a point or intersect
perimeter	the total distance around the outside of a 2D shape
area	the total amount of space inside a 2D shape
vertical	straight line up and down
horizontal	straight line left and right