

MATH · Y2–Y6

Geometry & Shape

Knowledge Organiser — Y2–Y6

2D shapes

1

Triangle

3 sides, 3 angles. Types: equilateral (all equal), isosceles (2 equal), scalene (none equal), right-angled.

2

Quadrilateral

4 sides. Types: square, rectangle, parallelogram, rhombus, trapezium, kite.

3

Regular polygon

All sides equal AND all angles equal.

Example: equilateral triangle, square, regular pentagon

4

Irregular polygon

Sides or angles (or both) are not all equal.

Example: most real-world shapes

5

Interior angles

The total of all angles inside a polygon. Triangle = 180° ; quadrilateral = 360° ; pentagon = 540° .

Example: $+180^\circ$ for each extra side

Angles and lines



1

Acute

Less than 90° .

Example: 30° , 45° , 89°

2

Right angle

Exactly 90° .

Example: corner of a square

3

Obtuse

Greater than 90° , less than 180° .

Example: 120° , 135°

4

Reflex

Greater than 180° .

Example: 270°

5

Parallel lines

Lines that never meet — always the same distance apart. Marked with arrows.

Example: railway tracks

6

Perpendicular lines

Lines that meet at exactly 90° . Marked with a small square.

Example: corner of a room

7

Line of symmetry

A line that divides a shape into two identical mirror halves.

Example: equilateral triangle has 3

