

KEY FACTS:

By the end of Key Stage I, children are expected to recognise, name and describe the properties of 2 Dimensional shapes (2D) including: a circle, a triangle, a square, a rectangle, a pentagon, a hexagon and an octagon. The main properties the children should be able to name are the amount of edges and the number of corners.

- All circles have a circumference, diameter and radius:
 - o The circumference is the distance all the way around a circle.
 - The diameter is the distance right across the middle of the circle.
 - The radius is the distance halfway across the circle. The radius is always half the length of the diameter.
- Triangles have three sides. There are many different types of triangles
- Quadrilaterals have four sides. The group name for all 2D four sided shapes is 'quadrilaterals'.
- Polygons are shapes with <u>many</u> straight sides.
 - Regular polygons have equal angles and sides of equal length.
 - o Irregular polygons have sides of different lengths.

Name of Shape	Edges	Properties of Shape	Shape Image
Circle	I	l curved side	
Equilateral triangle	3	3 equal sides 3 equal angles of 60°	
Isosceles triangle	3	2 equal sides 2 equal angles	
Scalene triangle	3	No equal sides No equal angles	
Right-angled triangle	3	One of its angles is a right angle (90°)	



2D SHAPES

Name of Shape	Edges	Properties of Shape	Shape Image
Square	4	4 equal sides 4 right angles A <i>regular</i> RECTANGLE!	
Rectangle	4	2 pairs of equal sides 4 right angles	
Rhombus	4	4 equal sides Opposite sides are parallel Opposite angles are equal	
Parallelogram	4	2 pairs of equal sides Opposite sides are parallel Opposite angles are equal	
Trapezium	4	One pair of parallel sides of different lengths	
Kite	4	2 pairs of equal sides next to each other No parallel sides.	

Name of Shape	Edges	Properties of Shape	Shape Image
Regular Pentagon	5	5 equal sides 5 equal corners/angles	
Regular Hexagon	6	6 equal sides 6 equal corners/angles	
Regular Octagon	8	8 equal sides 8 equal corners/angles	

In KSI, children are introduced to the term POLYGON.

They become familiar with <u>REGULAR PENTAGONS</u>, <u>HEXAGONS</u> and <u>OCTAGONS</u> but are also taught that any shape with a given number of sides has the <u>same NAME</u> as the regular example; however we call *it*<u>IRREGULAR</u> if it has <u>different length sides</u> and/or <u>different angles</u>.