

Year 3 - 2D Shape

Polygon – A polygon is any 2D shape with straight sides. Many polygons have special names. For example triangles, squares and rectangles are types of polygon. Polygons can be regular or irregular.

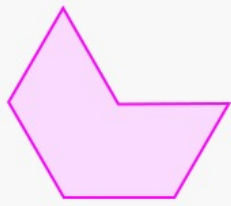
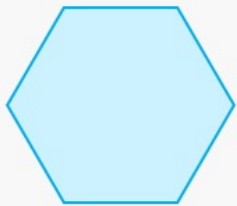
Surface – A surface is the face of the of a shape. It has length and breadth but no thickness. A surface can be flat or curved.

Regular – A regular polygon is any polygon that has all its sides and angles the same. A square is a regular quadrilateral.

Irregular – Irregular polygons do not have all their sides the same length. They have different size angles.

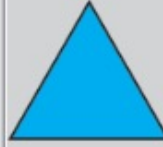
Regular

Irregular



A polygon can have three or more sides.

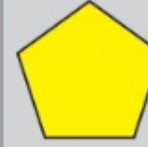
3 sides
Triangle



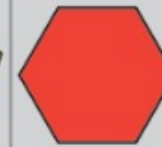
4 sides
Quadrilateral



5 sides
Pentagon



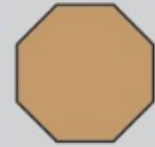
6 sides
Hexagon



7 sides
Heptagon

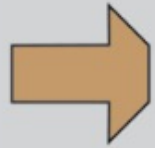
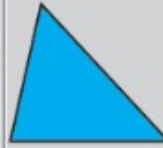


8 sides
Octagon



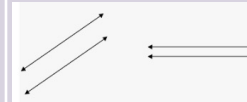
Regular Polygons
all sides are equal length and all internal angles are equal

Examples of
Irregular Polygons
any polygon that is not regular

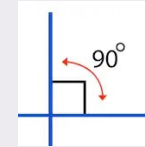


Parallel and Perpendicular lines

Parallel – Parallel lines are the same distance apart no matter how long they are. Parallel lines can never cross each other.

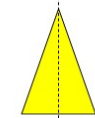


Perpendicular – Two things are perpendicular when they meet at right angles.



Line of Symmetry

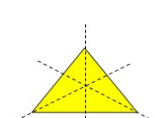
A line of symmetry divides a shape in half. One half is the reflection of the other half. The line of symmetry is the same as a mirror line. Some shapes have no lines of symmetry, others have one or more.



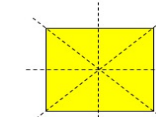
Isosceles triangle
1 line of symmetry



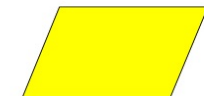
Rectangle
2 lines of symmetry



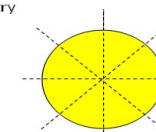
Equilateral triangle
3 lines of symmetry



Square
4 lines of symmetry



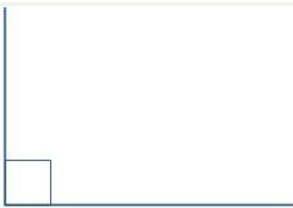
Parallelogram
no line of symmetry



Circle
infinite line of symmetry

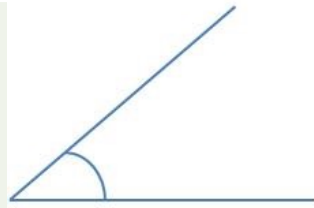
Types of angles

Right angle



Exactly 90°

Acute angle



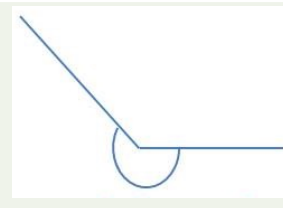
Less than 90°

Obtuse angle



More than 90°
Less than 180°

Reflex angle



More than 180°
Less than 360°