Vocabulary to know:

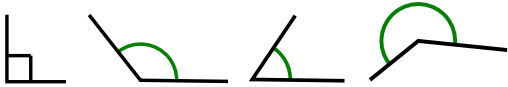## *Angles*:
Right: 90˚, a square corner:
Obtuse: bigger than a right angle, but smaller than a straight angle:
Acute: smaller than a right angle
Straight: the angle on a straight line
Reflex: an angle that is larger than a straight angle
Right, Obtuse,   Acute,   Reflex

Properties:
Equal/congruent: the same size (length or angle)
Parallel: lines that if continued indefinitely will never meet
Opposite: sides or angles that are opposite each other on the shape (an equal number of sides between them going around the shape both ways)
Adjacent: sides that share a vertex or angles that share a side.
Bisect: something bisects a line segment if it meets it in its midpoint. Something bisects and angle if it splits it into two equal angles.
Perpendicular: two lines that make a right angle where they meet.
Diagonal: The diagonals of a polygon are the lines that connect vertices that are not adjacent (a polygon must have 4 or more sides to have diagonals)
Convex: A polygon is convex if all of its diagonals lie inside the polygon. A non-polygon shape is convex if every line that connects two of its points lies inside of it.
Concave: a polygon is concave if any of its diagonals pass outside of it. A shape is concave if there is a line between two of its points that passes outside of it.

Triangles:
Equilateral: All sides are equal length
Isosceles: (At least) two sides are equal
Scalene: All sides are different lengths
Right: The biggest angle is a right angle
Obtuse: The biggest angle is an obtuse angle
Acute: The biggest angle is an acute angle (and so all of the angles are acute)

Quadrilaterals:
Quadrilateral: a quadrilateral is a polygon with (exactly) 4 sides.
Square: A square is a quadrilateral with 4 equal sides and 4 right angles.
Rectangle: A rectangle is a quadrilateral with 4 right angles
Rhombus: A rhombus is a quadrilateral with 4 equal sides.
Parallelogram: A parallelogram is a quadrilateral with two pairs of opposite parallel sides.
Trapezoid: A trapezoid is a quadrilateral with (at least one/one and only one) pair of parallel sides.
Kite: A kite is a quadrilateral whose 4 sides make up two pairs of adjacent equal sides.

Other shapes:

Polygon: a polygon is a shape made of a sequence of straight line segments, where each line segment meets the next line segment at a vertex, and the last line segment meets the first one at a vertex. None of the segments cross each other or meet each other except where a segment meets the next one at a vertex.
Circle: A circle is the set of points that all have an equal distance from a point called the center of the circle. The center point is inside the circle, but is not considered to be part of the circle.
Regular: A polygon is regular if all of its sides are equal and all of its angles are equal