- A point determines a location. It is usually denoted by a capital letter.
- A line segment corresponds to the shortest distance between two points. The line segment joining points A and B is denoted by $\overrightarrow{AB}$ and $\overrightarrow{BA}$ denote the same line segment.
- A line is obtained when a line segment like $\overline{AB}$ is extended on both sides indefinitely; it is denoted by $\overline{AB}$ or sometimes by a single small letter like l.
- Two distinct lines meeting at a point are called intersecting lines.
- Two lines in a plane are said to be parallel if they do not meet.
- A ray is a portion of line starting at a point and going in one direction endlessly.
- Any drawing (straight or non-straight) done without lifting the pencil may be called a curve. In this sense, a line is also a curve.
- A simple curve is one that does not cross itself.
- A curve is said to be closed if its ends are joined; otherwise it is said to be open.
- A polygon is a simple closed curve made up of line segments. Here,
  (i) The line segments are the sides of the polygon.
  (ii) Any two sides with a common end point are adjacent sides.
  (iii) The meeting point of a pair of sides is called a vertex.
  (iv) The end points of the same side are adjacent vertices.
  (v) The join of any two non-adjacent vertices is a diagonal.
- An angle is made up of two rays starting from a common end point.
- Two rays $\overline{OA}$ and $\overline{OB}$ make $\angle AOB$(or also called $\angle BOA$).
- An angle leads to three divisions of a region:
- On the angle, the interior of the angle and the exterior of the angle.
- A triangle is a three-sided polygon.
- A quadrilateral is a four-sided polygon. (It should be named cyclically). In any quadrilateral ABCD, $\overline{AB}$ & $\overline{DC}$ and $\overline{AD}$ & $\overline{BC}$ are pairs of opposite sides. $\angle A$ & $\angle C$ and $\angle B$ & $\angle D$ are pairs of opposite angles. $\angle A$ is adjacent to $\angle B$ & $\angle D$;

similar relations exist for other three angles.

- A circle is the path of a point moving at the same distance from a fixed point. The fixed point is the Centre, the fixed distance is the radius and the distance around the circle is the circumference.
- A chord of a circle is a line segment joining any two points on the circle.
- A diameter is a chord passing through the Centre of the circle.
- A sector is the region in the interior of a circle enclosed by an arc on one side and a pair of radii on the other two sides.
- A segment of a circle is a region in the interior of the circle enclosed by an arc and a chord.
- The diameter of a circle divides it into two semi-circles.