Point	A point has no dimensions. It is usually represented as a dot.
Line	A **line** extends forever in one dimension. It is usually represented by a straight line with arrowheads at both ends. Lines are always straight unless they are said to be otherwise.
Plane	A **plane** extends forever in two dimensions.
Collinear	**Collinear** points are points that lie on the same line.
Coplanar	**Coplanar** points are points that lie on the same plane.
Line Segment	A **line segment** is a finite part of a line.

Ray	A **ray** consists of the initial point and all the points that lie in the direction of the ray.
Opposite Rays	Opposite rays have the same initial point but extend in opposite directions.
Intersection	The intersection of two or more figures is the set of points they have in common.
Postulates & Axioms	Postulates and axioms are rules that are accepted without proof.
Theorems	Theorems are rules that are proved.
Coordinate	The real number that corresponds to a point on a line is the coordinate of the point.

Distance/Length	The distance between two points on a line is the absolute value of the difference of their coordinates. This distance is also called the length of the line segment between the two points.
Segment Addition Postulate	If B is between A and C, then AB + BC = AC
The Distance Formula	If A(x1, y1) and B(x2, y2) are points in a coordinate plane, then the distance between A and B is AB =
Congruent Segments	Line segments that have the same length are called congruent segments.
Pythagorean Theorem	The Distance Formula is based on the Pythagorean Theorem. c2 = a2 + b2 , where c is the length of the hypotenuse of a right triangle and a and b are the lengths of the other two sides.
Angle	An angle consists of two rays that have the same initial point.

Sides	The rays are the sides of the angle.
Vertex	The initial point is the vertex of the angle.
Congruent Angles	Angles that have the same measure are called congruent angles.
Protractor Postulate	When the center of a protractor is placed on the vertex of an angle the rays can be matched with the real numbers from 0 to 180.
Measure of an Angle	The measure of an angle is equal to the absolute value of the difference between the real numbers corresponding to the rays that form the sides of the angle.
Interior	A point is in the interior of an angle if it is between the points that lie on each side of the angle.

Exterior	A point is in the exterior of an angle if it is not on the angle or in its interior.
Angle Addition Postulate	If P is in the interior of $\angle RST$, then $m\angle RST = m\angle RSP + m\angle PST$.
Acute Angles	$0° < m\angle < 90°$
Obtuse Angles	$90° < m\angle < 180°$
Right Angle	$m\angle = 90°$
Straight Angle	$m\angle = 180°$

Midpoint	The midpoint of a segment is the point that divides or bisects the segment into two congruent segments.
Segment Bisector	A segment bisector is a segment, ray, line, or plane that intersects a segment at its midpoint.
The Midpoint Formula	If A(x1,y1) and B(x2,y2) are points in a coordinate plane, then the midpoint of *AB* has coordinates
Angle Bisector	An angle bisector is a ray that divides an angle into two adjacent congruent angles.
Vertical Angles	Two angles are vertical angles if their sides form two pairs of opposite rays.
Linear Pair	Two adjacent angles form a linear pair if their noncommon sides are opposite rays.

Complementary Angles	Two angles are complementary angles if the sum of their measures is 90°.
Supplementary Angles	Two angles are supplementary angles if the sum of their measures is 180°.
Formulas for Perimeter, Circumference, and Area of a Square	Square of side length s: $P = 4s$, $A = s^2$
Formulas for Perimeter, Circumference, and Area of a Rectangle	Rectangle of length l and width w: $P = 2l + 2w$, $A = lw$
Formulas for Perimeter, Circumference, and Area of a Triangle	Triangle of side lengths a, b, and c, base b, and height h: $P = a + b + c$, $A = \frac{1}{2}bh$
Formulas for Perimeter, Circumference, and Area of a Circle	Circle of radius r: $C = 2\pi r$, $A = \pi r^2$