100 Word Vocabulary List Geometry

1. **Geometry** - branch of mathematics that deals with points, lines, planes and solids and examines their properties.
2. **Point** – has no size; length, width, or height. It is represented by a dot and named by a capital letter.
2. **Line** – set of points which has infinite length but no width or height. A line is named by a lower case letter or by any two points on the line.
3. **Plane** – set of points that has infinite length and width but no height. We name a plane with a capital letter.
4. **Space** – set of all points.
5. **Collinear points** – points that lie on the same line.
6. **Noncollinear points** – points that do not lie on the same line.
7. **Coplanar points** – points that lie on the same plane.
8. **Noncoplanar points** – points that do not lie on the same plane.
9. **Segment** – part of a line that consists of two points called endpoints and all points between them.
10. **Ray**- is the part of a line that contains an endpoint and all points extending in the other direction.
11. **Congruent segments** – segments that have the same length.
12. **Bisector of a segment** – line, ray segment, or plane that divides a segment into two congruent segments.
13. **Midpoint of a segment** – a point that divides the segment into two congruent segments.
14. **Acute angle** – angle whose measure is between 0 degrees and 90 degrees.
15. **Right angle** – angle whose measure is 90 degrees.
16. **Obtuse angle** – angle whose measure is greater than 90 degrees but less than 180 degrees.
17. **Straight angle** – angle whose measure is 180 degrees.
18. **Congruent angles** – angles that have the same measure.
19. **Angle bisector** – ray that divides an angle into two congruent adjacent angles.
20. **Triangle** – the figure formed by three segments joining three noncollinear points. Each of the three points is a vertex of the triangle and the segments are the sides.
21. **Acute triangle**- triangle that has all acute angles.
22. **Right triangle** – triangle with a right angle.
23. **Obtuse triangle** – triangle with an obtuse angle.
24. **Equiangular triangle** – triangle with all angles congruent.
25. **Scalene triangle** – triangle with no sides congruent.
26. **Isosceles triangle** – triangle with at least two sides congruent.
27. **Equilateral triangle** – triangle with all sides congruent.
28. **Adjacent angles** – two coplanar angles with a common vertex and a common side between them
29. **Vertical angles** – the non-adjacent angles formed by two intersecting lines.
30. **Complementary angles** – two angles whose sum is 90 degrees.
31. **Supplementary angles** – two angles whose sum is 180 degrees.
32. **Perpendicular lines** – two lines that intersect to form right angles.
33. **Parallel lines** – two lines are parallel if they are coplanar and do not intersect.
34. **Skew lines** – are noncoplanar lines they will not intersect.
35. **Polygon** – union of 3 or more coplanar segments that meet only at endpoints such that at most two segments meet at one endpoint and each segment meets exactly two other segments.
36. **Regular polygon** – polygon which is equilateral and equiangular.
37. **Congruent triangles** – two triangles are congruent if corresponding sides are congruent and corresponding angles are congruent.
38. **Median of a triangle** – segment from the vertex of a triangle to the midpoint of the opposite side.
39. **Altitude of a triangle** – segment from the vertex of a triangle perpendicular to the line containing the opposite side.
40. **Parallelogram** – quadrilateral with both pairs of opposite sides parallel.
41. **Rectangle** – parallelogram with a right angle.
42. **Rhombus** – parallelogram with consecutive sides congruent.
43. **Square** – all sides congruent and all four right angles.
44. **Trapezoid** – quadrilateral with exactly one pair of opposite sides parallel.

45. **Ratio** – comparison of two numbers by division.
46. **Proportion** – equation that states two ratios are equal.
47. **Pythagorean Theorem** – in a right triangle, the sum of the squares of the legs is equal to the square of the hypotenuse
48. **Circle** – the set of points in a plane that are equidistant from a fixed point called the center.
49. **Radius** – segment whose endpoints are the center of the circle and a point on the circle.
50. **Chord** – segment that connects two points on the circle.
51. **Diameter** – chord that passes through the center of the circle.
52. **Secant** – line that intersects a circle in two points.
53. **Tangent** – line in the plane of the circle that intersects the circle in one point.
54. **Concentric circles** – two or more circles in the same plane with the same center.
55. **Congruent circles** – circles that have congruent radii.
56. **Sphere** – set of points in space a given distance from a given point called the center.
57. **Arc** – consists of two points and the continuous part of a circle between them.
58. **Semi-circle** – arc whose endpoints are the endpoints of a diameter.
59. **Minor arc** – arc whose measure is less than a semi-circle or 180 degree.
60. **Major arc** – arc whose measure is greater than a semi-circle or 180 degrees.
61. **Central angle of a circle** – angle whose vertex is the center of the circle and whose rays are radii of the circle.
62. **Congruent arcs** – arcs with equal measure in the same circle or in congruent circles.
63. **Inscribed angles** – angle whose vertex is on the circle and whose sides are chords of the circle.
64. **Bases** – congruent polygons lying in parallel planes.
65. **Altitude** – segment joining the two base planes and perpendicular to both.
66. **Lateral faces** – faces of a prism that are not its bases.
67. **Lateral edges** – intersection of adjacent lateral faces form lateral edges.
68. **Lateral area** – sum of the area of its lateral faces.
69. **Surface area** – sum of the area of all its faces.
70. **Volume** – number of cubic units contained in a solid.
71. Right Prism – is a prism whose lateral faces are rectangles.
72. Oblique prism – is a prism whose lateral faces are parallelograms.
73. Cube – is a prism where all sides are squares.
74. Triangular prism – is a prism whose parallel faces (the bases) are congruent triangles.
75. Cylinder – has two congruent circular bases in parallel planes.
76. Cone – has a vertex and a circular base.
77. Line of symmetry – divides a figure into two congruent halves that reflect each other.
78. Perimeter – of a polygon is the distance around the polygon.
79. Area – of any surface is the number of square units required to cover the surface.
80. Volume – of a 3-dimensional figure is the number of cubic units contained in the solid.
81. Circumference – the distance around a circle.
82. Conditional statement – a statement that can be written in an if-then form.
83. Hypothesis – in a conditional statement the statement that immediately follows the word if.
84. Conclusion – in a conditional statement the statement that immediately follows the word then.
85. Converse – the statement formed by exchanging the hypothesis and the conclusion of a conditional statement.
86. Inverse – the statement formed by negating both the hypothesis and the conclusion of a conditional statement.
87. Contrapositive – the statement formed by negating both the hypothesis and conclusion of the converse of a conditional statement.
88. Biconditional – the conjunction of a conditional statement and its converse.
89. Deductive reasoning – a system of reasoning that uses facts, rules,definitions, or properties to reach logical conclusions.
90. Inductive reasoning – reasoning that uses a number of specific examples to arrive at a plausible prediction.
91. Proof – a logical argument in which each statement you make is supported by a statement that is accepted as true.

92. Postulate- a statement that describes a fundamental relationship between basic terms of geometry. Postulates are accepted as true without proof.
93. Theorems – a statement or conjecture that can be proven true by given, definitions, postulates, or already proven theorems.
94. Two-column proof – a formal proof that contains statements and reasons organized in two columns.
95. Paragraph proof – an informal proof written in the form of a paragraph that explains why a conjecture for a given situation is true.
96. Flow proof – a proof that organizes statements in logical order, starting with given statements. Each statement is written in a box with the reason verifying the statement written below the box.
97. Conjecture – an educated guess based on known information.
98. Sine – for an acute angle of a right triangle, the ratio of the measure of the leg opposite the acute angle to the measure of the hypotenuse.
99. Cosine – for an acute angle of a right triangle, the ratio of the measure of the leg adjacent to the acute angle to the measure of the hypotenuse.
100. Tangent – for an acute angle of a right triangle, the ratio of the measure of the leg opposite the acute angle to the measure of the leg adjacent to the acute angle.