

# Geometry Curriculum Map

TOPIC & TEXTBOOK CHAPTERS	Duration	Month
<b>Algebra Basics</b> <u>Chapter 1:</u> Number Sets, Field Axioms, Variables, Expressions, Equations, Inequalities, Polynomials, Proving Properties from Axioms	2 wks	Sept
<b>Deductive Reasoning</b> <u>Chapter 2:</u> If-Then Statements, Converses, Properties from Algebra, Proving Theorems, Special Pairs of Angles, $\perp$ Lines, Proofs, Associated Constructions <u>Supplemental:</u> Inductive/deductive reasoning, conjectures, counter examples, conditionals, bi-conditionals, Venn diagrams, Algebraic proofs, props of equality and congruence, segment and angle proofs	3 wks	Sept/ Oct
<b>Points, Lines, Planes &amp; Angles</b> <u>Chapter 3:</u> Points, Lines, Planes, Segments, Rays, Distance, Angles, Postulates and Theorems Relating Points, Lines and Planes, Associated Constructions	2 wks	Oct
<b>Parallel Lines &amp; Planes</b> <u>Chapter 3:</u> Parallel Lines, Properties of Parallel Lines, Proving Lines Parallel, Angles of a Triangle, Angles of a Polygon, Associated Constructions	3 wks	Oct/Nov
<b>Congruent Triangles</b> <u>Chapter 4:</u> Congruent Figures, Proving Triangles Congruent using SSS, ASA, SAS, AAS and HL, Using Congruent $\Delta$ s in other Proofs, CPCTC, Isosceles $\Delta$ Theorems, Medians, Altitudes, $\perp$ Bisectors, Associated Constructions	3 wks	Dec/Jan
<b>Right Triangles &amp; Trigonometry</b> <u>Chapter 8:</u> Similar Right Triangles, Pythagorean Theorem and its Converse, Special Right $\Delta$ s, Tangent, Cosine, Sine, Applications of Right $\Delta$ Trigonometry, <u>Chapter 6:</u> $\Delta$ Inequality	3 wks	Jan/Feb
<b>Transformations, Permutations, and Combinations</b> <u>Chapter 14:</u> Mappings, Reflections, Translations, Glide Reflections, Rotations, Dilations	3 wks	Feb/Mar
<b>Circles</b> <u>Chapter 9:</u> Tangents, Arcs, Central Angles, Chords, Inscribed Angles, Other angles, Arc Lengths, Areas of Sectors	3 wks	Mar/Apr
<b>Areas of Plane Figures</b> <u>Chapter 11:</u> Areas of Rectangles, Parallelograms, Triangles, Rhombuses, Trapezoids, Regular Polygons and Circles; Ratio of Areas, Geometric Probability, Counting Outcomes,	3 wks	May

Permutations, Combinations		
<b>Areas and Volumes of Solids</b> <u>Chapter 12</u> : Prisms, Pyramids, Cylinders, Cones, Spheres, Similar Solids	3 wks	May/J un