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| **Geometry** |
| Time Frame | Topic/Unit | Skills/Concepts | Major Assessments  | Core Standards | Resources |
| 2 – 3 Weeks | **U1:** Essentials of Geometry | * Points, Distances, and Segments
* Midpoints and Bisectors
* Line, Rays, and Angles
* Definitions Involving Pairs of Angles
* Triangles
* Circles and Arcs
* Constructing a Triangle Given its side lengths
* More Properties of Lines
 | End of Unit Test | G-CO.1 G-CO.12  | * Emathinstruction
* *Integrated Mathematics Couse II*
* *Geometry for Enjoyment and Challenge*
* *Geometry: Tools for a changing World (Prentice Hall)*
* *Geometry: New York (Prentice Hall)*
* *Geometry (AMSCO)*
 |
| 2 weeks | **U2:** Geometric Constructions | * Intro to Constructions
* Constructing Angles and Parallel Lines
* Constructing Midpoints and Perpendicular Lines
* Constructing Altitudes and the Orthocenter of a Triangle
* Constructing Medians and the Centroid of a Triangle
* Constructing the Circumscribed Circle of a Triangle
* Constructing the Inscribed circle of a Triangle
* Constructing Inscribed Regular Polygons
 | End of Unit Test | G-CO.12 G-C.3 G-CO.13  | * Emathinstruction
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| 3 weeks | **U3:** Transformations, Rigid Motions, and Congruence | * Intro to transformations
* Line Reflections
* Point Reflection
* Translations
* Composition of Reflections over Parallel Lines
* Rotations
* Composition of Reflections over Non-Parallel Lines
* Basic Rigid Motions and Angle Congruence
* Congruence and Rigid Motions
* Isosceles Triangles and Basic Rigid Motions
* Symmetries of a Figure
 | End of Unit Test | G-CO.2 G-CO.3 G-CO.4 G-CO.5 G-CO.6 G-CO.7 G-CO.9 G-CO.10  | * Emathinstruction
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| 5 Weeks | **U4:** Euclidean Triangle Proofs | * Using Givens and Definitions in Proof
* The First Postulates
* The Substitution Postulate
* The Addition Postulate
* Side-Angle-Side Theorem of Congruence
* Angle-Side-Angle Theorem of Congruence
* Side-Side-Side Theorem of Congruence
* More Practice Proving Triangles Congruent
* Proving Overlapping Triangles Congruent
* Corresponding Parts of Congruent Triangles are Congruent
* Properties of Parallel Lines
* Proving Lines Parallel
* Interior and Exterior Angle Theorem
* Angle-Angle-Side Theorem of Triangle Congruence
* Properties of Isosceles Triangles
* Proving Triangles are Isosceles
* Hypotenuse-Leg Theorem of Congruent Right Triangles
* Additional Triangle Proofs
 | * Triangle Proof Test
* Parallel Lines Proof Quiz
* End of Unit Test
 | G-CO.9 G-CO.10  | * Emathinstruction
* *Integrated Mathematics Couse II*
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| 4 weeks | **U5:** Coordinate Geometry | * Slope of a Line
* Slopes of Parallel and Perpendicular Lines
* Y-intercept form of a line
* Point Slope Forma of a Line
* Intersection of Lines
* Simplifying Square Root Radicals
* Pythagorean Theorem
* Distance Formula
* Midpoint Formula
* Areas and Perimeter of Polygons in the Coordinate Plane
* More Coordinate Proofs
* Rotations in the Coordinate Plane
* Point Reflections and Rotations of $180°$
* Reflections in the Coordinate Plane
* Translations in the Coordinate Plane
* Combination of Transformations in the Coordinate Plane
 | Line QuizCoordinate Quiz End of Unit Test | G-GPE.4 G-GPE.5 G-SRT.8 G-CO.5  | * Emathinstruction
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| 2 Weeks | **U6:** Quadrilaterals | * Trapezoids
* Properties of Parallelograms Part 1
* Properties of Parallelograms Part 2
* Proving Parallelograms
* Rectangles
* Rhombus
* Squares
* Additional Practice With Quadrilaterals
 | End of Unit Test | G.CO.11 | * Emathinstruction
* *Integrated Mathematics Couse II*
* *Geometry for Enjoyment and Challenge*
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| 3 weeks | **U7:** Dilations and Similarity | * Intro to Dilations
* Properties of Dilations
* Dilations in the coordinate plane
* Dilations and Angles
* Intro to Similarity
* Similarity Criteria
* Reasoning with Similarity
* Means and Extremes Theorem
* Midsegment Theorem
* Side Splitter Theorem
* Partitioning of a Line Segment
* Partition Formula
* Medians of a Triangle
* Right Triangles and Similarity
 | End of Unit Test | G.SRT. 1G.SRT. 1aG.SRT. 1bG.SRT. 2G.SRT. 3G.SRT. 4G.SRT. 5G.SRT. 5aG.SRT. 5b | * Emathinstruction
* *Integrated Mathematics Couse II*
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* *Geometry (AMSCO)*
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| 2 weeks | **U8:** Right Triangle Trigonometry | * Similar Right Triangles
* Applications of Similar Triangles
* Trigonometric Ratios
* Solving for the Missing Sides of a Right Triangle
* Inverse Trig Functions
* Trig Applications
* More Trig Applications
* Understanding the Trig Ratios
* Area of a Triangle Using Trig
 | End of Unit Test | G-SRT.6 G-SRT.7 G-SRT.8  | * Emathinstruction
* *Integrated Mathematics Couse II*
* *Geometry for Enjoyment and Challenge*
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| 3 weeks | **U9:** Circle Geometry | * Circle Terminology
* Equations of a Circle
* Placing Circles in Standard Form
* Inscribed Angles
* More Work with Inscribed Angles
* Intersecting Chords
* Tangents to Circle
* Tangent and Chord Angles
* Tangent and Secant Angles
* Constructing angetns
* Equations of Tangent Line
 | End of Unit Test | G.C.1G.C.2aG.C.2bG.C.5 | * Emathinstruction
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 |
| 3 weeks | **U10:** Measurement and Modeling | * Perimeter
* Circumference of a Circle
* Area of Polygons
* Area of Circles
* Sectors of a Circle
* Radian Measure of Angles
* Solids and their Cross Sections
* Volume of Prisms and Cylinders
* Volume of Pyramids and Cones
* Spheres
* Volume of Truncated Cone
 | End of Unit Test | G-GPE.7 G-MG.1 G-MG.2 G-MG.3 G-GMD.1 G-GMD.3 G-GMD.4 G-C.1 G-C.5  | * Emathinstruction
* *Integrated Mathematics Couse II*
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