## Geometry A Scope and Sequence

| Suggested timeline | CCSS | Learning Target: <br> Students will | Resources |
| :---: | :---: | :---: | :---: |
| Week 1 | G.CO.A. 1 Know precise definitions of angle based on the undefined notions of point, line, distance along a line. | Understand the basic tools of geometry: points, lines, planes, and angles. | 1.1-1.5 |
| Week 2 | G.GPE.B.6 Find the point on a directed line segment between two given points that partitions the segment in a given ratio. | Measure and calculate the size of segments and angles. Determine the distance between two points, using values on the coordinate plane. | 1.7-1.8 |
| Week 3\&4 | Preparation for G.CO.C. 9 Prove theorems about lines and angles. G.CO.C. 10 Prove theorems about triangles. G.CO.C. 11 Prove theorems about parallelograms. | Arrive at conclusions through logical reasoning and understand and logically construct proofs. | 2.1-2.5 |
| Week 5\&6 | G.CO.C. 9 Prove theorems about lines and angles. <br> G.CO.C. 10 Prove theorems about triangles measures of interior angles of a triangle sum to $180^{\circ}$ <br> G.MG.A. 3 Apply geometric methods to solve design problems | Understand the properties of parallel lines, including how angles made by them and a transversal are related. Understand the differences between parallel and perpendicular lines. They also should understand the nature of the interior and exterior angles of a triangle | 3.1-3.5 |
| Week 7\&8 | G.CO.C. 10 Prove theorems about triangles. G.SRT.B. 5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. | Understand the properties of congruent triangles, how to determine whether triangles are congruent, and how to use congruent triangles to solve problems | 4.1-4.4 |
| Week 9 | G.SRT.B. 5 Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures. | Work with congruent triangles to solve problems and prove relationships in these triangles. | 4.5-4.7 |
| Week 10 | G.CO.C. 10 Prove theorems about triangles . . . the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length. <br> G.SRT.B. 5 Use congruence criteria for triangles to solve problems and to prove relation ships in geometric figures. G.GPE.B. 5 Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems. <br> G.GPE.B. 7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula. | Use the properties and relationships of mid-segments of triangles to solve problems. <br> Understand perpendicular bisectors and angle bisectors, and their properties. <br> Use relationships from triangles formed using these Bisectors. | 5.1-5.2 |

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| Week |  |  |  |
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| $11 \& 12$ | G.C.A.2 Identify and describe relationships among inscribed <br> angles, radii, and chords. <br> G.C.A.3 Construct the inscribed and circumscribed circles of a <br> triangle | Use their understanding of circumcenters and inscribed <br> and circumscribed circles of triangles. <br> Understand relationships from triangles formed using <br> medians and altitudes. | $5.3-5.7$ |
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