# Pacing Guide: College Geometry

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<tr>
<th>Week</th>
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<th>Summary of Resources and Activities</th>
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<td>1</td>
<td>Introduction</td>
<td>1. Read the “Introduction,” and watch the video</td>
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<td>Learning Resources</td>
<td>1. Enroll in “Geometer’s Sketchpad”</td>
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|      | Axiomatic Systems | 1. Read all chapters, sections, and links in “Study Introductory Concepts”  
2. Complete all activities in “Geometer’s Sketchpad Lab: Introduction to Geometer’s Sketchpad”  
3. “Explore and Study Alternatives to Euclidean Geometry”  
4. “Explore Triangles in Non-Euclidean Geometries”  
5. Study “Axiomatic Systems” and watch the video  
6. Study “Undefined Terms, Verifying Axiom Independence and Proving Theorems”  
7. Review the information in “Examples of Axiomatic Systems”  
8. Complete and submit task 1 to TaskStream  |
| 2    | Lines, Angles and Circles | 1. “Explore Angle Classification and Relationships in Euclidean Geometry”  
2. “Explore Points and Lines from an Analytic Perspective”  
3. “Study and Review Angle Relationship”  
4. “Synthesize and Practice with Angle Relationships and Coordinate Geometry”  
5. Complete “Geometer’s Sketchpad Lab: Constructing Parallel and Perpendicular Lines”  
6. Explore the “Parts of a circle - pictorial index”  
7. Explore the “Basic Equation of a Circle”  
8. Read the listed sections in “College Geometry 2” under “Study Constructions and Circles”  
9. “Synthesize and Practice with Circle Properties”  
10. Complete “Geometer’s Sketchpad Lab: Circles”  |
| 3    | Triangles, Congruence and Similarity | 1. “ Explore Triangles and Triangle Properties,” then complete the Quiz: Triangles  
2. “Study Triangle Relationships” by reading sections 3.6 through 3.9 in College Geometry 2  
3. “Synthesize and Practice with Angles, Circles, and Triangles”  
4. Complete “Geometer’s Sketchpad Lab: Constructing Triangles”  
5. “Explore Triangle Congruence” and complete the activity as directed. Then view the video  
6. In “Study Triangle Congruence and Similarity” read sections 4.1 and 4.2 College Geometry 2  
7. Complete “Geometer’s Sketchpad Lab: Triangle Congruence and SSA Case”  
8. “Explore the Pythagorean Theorem”  
9. “Study More Triangle Theorems and Special Triangles”  
10. Synthesize and Practice Triangle Congruence, Similarity and Pythagorean Theorem”  
11. Explore “Tangrams”  |
| 4    | Quadrilaterals and Higher Order | 1. “Explore Quadrilaterals and Their Interrelationships”  
2. “Study Quadrilaterals and Their Interrelationships” by |
| Polygons | reading sections 5.1 and 5.2 in College Geometry 2  
4. Watch “Verifying a Dissected Quadrilateral”  
5. “Study Higher Order Polygons” sections 5.3 and 5.4 in College Geometry 2  
6. Complete “Geometer’s Sketchpad Lab: Quadrilaterals”  
7. “Review Perimeter and Area of Polygons” in sections 5.5 and 5.6 in College Geometry 2  
8. “Synthesize and Practice Concepts about Quadrilaterals and Higher Order Polygons” by completing the exercises at the end of chapter 5 in College Geometry 2  
9. Complete and submit task 2 in TaskStream  |
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| 5 Visualization | 1. Complete all “Annenberg Learner” sessions  
2. Refer to the “Math Open Ref” for help and practice  
3. Read all designated sections in College Geometry 2  
4. Watch all topic related videos  
5. Review “Representing Three-Dimensional figures in Two Dimensions” using the 3D Drawing link  
6. Investigate “Solids of Revolution from Figures in Two Dimensions” via the 3D Transmographer link  
7. “Study, Synthesize, and Practice Ideas Using Surface Area, Volume, and Formula Derivation”  
8. Interact with the Three Pyramids that Form a Cube demonstration link  
9. Complete exercises at the end of chapter 6 in College Geometry 2  
10. “Explore Scaling” via the Scale Factor link  
11. “Study and Review Scaling”  |
| 6 Geometric Transformations | 1. “Explore Transformations” using the posted links  
2. Read all designated sections in College Geometry 2  
3. Watch all topic related videos  
4. “Review and Investigate Fundamental Isometries” via the Isometries of the Plane link  
5. “Explore Tessellations”  
6. Complete “Geometer’s Sketchpad Lab: Transformations”  
7. Complete exercises at the end of chapter 7 in College Geometry 2 |