

**RIDGECROFT SCHOOL  
GEOMETRY**

**PACING GUIDE**

TOPICS/CONCEPTS	PACE	NC SCOS	RESOURCE: TEXTBOOK: Geometry (McDougall- Littell)
<b>FIRST GRADING PERIOD</b>	<b>30 Days</b>		
BASICS OF GEOMETRY REASONING AND PROOF	30	2.01, 2.02	TEXTBOOK: Chapters 1,2
<b>SECOND GRADING PERIOD</b>	<b>30 Days</b>		
PERPENDICULAR AND PARALLEL LINES CONGRUENT TRIANGLES	30	2.02, 2.03	TEXTBOOK: Chapters 3, 4
<b>THIRD GRADING PERIOD</b>	<b>30 Days</b>		
PROPERTIES OF TRIANGLES QUADRILATERALS	25	2.03	TEXTBOOK: Chapters 5, 6
REVIEW AND ASSESSMENT	5		
<b>FOURTH GRADING PERIOD</b>	<b>30 Days</b>		
TRANSFORMATIONS SIMILARITY	30	2.03, 3.01 Supplement: 3.02	TEXTBOOK: Chapters 7, 8
<b>FIFTH GRADING PERIOD</b>	<b>30 Days</b>		
RIGHT TRIANGLES AND TRIGONOMETRY CIRCLES	30	1.01, 2.03,	TEXTBOOK: Chapters 9, 10
<b>SIXTH GRADING PERIOD</b>	<b>30 Days</b>		
AREA OF POLYGONS AND CIRCLES SURFACE AREA AND VOLUME	25	1.02, 1.03, 2.04	TEXTBOOK: Chapters 11, 12
REVIEW / ASSESSMENT	5		

8/1/06

**NC STANDARD COURSE OF STUDY**

<p>Geometry continues students' study of geometric concepts building upon middle school topics. Students will move from an inductive approach to deductive methods of proof in their study of two- and three-dimensional geometric figures. Reasoning skills will be emphasized and students will broaden their use of the coordinate plane. Appropriate technology, from manipulatives to calculators and graphics software, should be used regularly for instruction and assessment.</p> <p>Prerequisites:</p> <ul style="list-style-type: none"> <li>• Apply geometric properties and relationships to solve problems.</li> <li>• Use formulas to solve problems.</li> <li>• Define and use linear expressions to model and solve problems.</li> <li>• Operate with matrices to model and solve problems.</li> </ul>
<b>GOAL 1: The learner will perform operations with real numbers to solve problems.</b>
<p>1.01 Use the trigonometric ratios to model and solve problems involving right triangles.</p> <p>1.02 Use length, area, and volume of geometric figures to solve problems. Include arc length, area of sectors of circles; lateral area, surface area, and volume of three-dimensional figures; and perimeter, area, and volume of composite figures.</p> <p>1.03 Use length, area, and volume to model and solve problems involving probability.</p>
<b>GOAL 2: The learner will use geometric and algebraic properties of figures to solve problems and write proofs.</b>
<p>2.01 Use logic and deductive reasoning to draw conclusions and solve problems.</p> <p>2.02 Apply properties, definitions, and theorems of angles and lines to solve problems and write proofs.</p> <p>2.03 Apply properties, definitions, and theorems of two-dimensional figures to solve problems and write proofs:</p> <ul style="list-style-type: none"> <li>• Triangles.</li> </ul>

- Quadrilaterals.
- Other polygons.
- Circles.

2.04 Develop and apply properties of solids to solve problems.

**GOAL 3: The learner will transform geometric figures in the coordinate plane algebraically.**

3.01 Describe the transformation (translation, reflection, rotation, dilation) of polygons in the coordinate plane in simple algebraic terms.

3.02 Use matrix operations (addition, subtraction, multiplication, scalar multiplication) to describe the transformation of polygons in the coordinate plane.