

Grade 3 Mathematics – Unit 5: Geometry

Phoenixville Area School District

Stage 1 Desired Results		
<p>PA Core Standards: CC.2.3.3.A.1 Identify, compare, and classify shapes and their attributes.</p> <p>PSSA Assessment Anchors: M03.C-G.1.1 Analyze characteristics of polygons.</p>	Transfer	
	<p>TRANSFER GOALS <i>Students will be able to independently use their learning to...</i></p> <ul style="list-style-type: none"> Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems. Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale. 	
	Meaning	
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> Patterns exhibit relationships that can be extended, described, and generalized. A shape’s characteristics (dimensionality, side measures, angle measures, faces, edges, area, perimeter, and volume) are used for identification. Concepts of congruency and similarity are used to relate and compare two- and three-dimensional figures. Points, lines, and planes are the building blocks of geometry. </td> <td style="width: 50%; padding: 5px;"> <p>ESSENTIAL QUESTIONS <i>Students will keep considering...</i></p> <ul style="list-style-type: none"> Where in the real-world do I find patterns? How are geometric shapes and objects measured/classified/compared? What tools and units are used to measure the attributes of an object? How can we use attributes and properties to solve problems? How can I put shapes together and take them apart to form other shapes? </td> </tr> </table>	<p>UNDERSTANDINGS <i>Students will understand that...</i></p> <ul style="list-style-type: none"> Patterns exhibit relationships that can be extended, described, and generalized. A shape’s characteristics (dimensionality, side measures, angle measures, faces, edges, area, perimeter, and volume) are used for identification. Concepts of congruency and similarity are used to relate and compare two- and three-dimensional figures. Points, lines, and planes are the building blocks of geometry.
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Knowledge and Skills Acquisition		
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- How to identify an angle and determine if it is less than a right angle, a right angle, or greater than a right angle
- The difference between parallel and perpendicular lines
- Plane figures, open figures, and closed figures all have specific attributes
- A polygon is a closed plane figure formed by three or more-line segments
- The attributes of a quadrilateral, square, rectangle, trapezoid, rhombus, parallelogram, pentagon, hexagon, and octagon
- Congruent figures are the same size and same shape
- Symmetry is a figure having two congruent sides that match up exactly when the figure is folded

VOCABULARY

- Point / Endpoint
- Line / Line Segment
- Angle / Right Angle
- Perpendicular Lines
- Parallel Lines
- Polygon
- Plane Figure / Open Figure / Closed Figure
- Vertex
- Quadrilateral / Square / Rectangle/ Trapezoid / Rhombus / Parallelogram / Pentagon / Hexagon / Octagon
- Congruent
- Symmetrical / Symmetry / Line of Symmetry

- Explaining the difference between a line and line segment.
- Recognizing right angles standing alone or within a figure.
- Identifying the difference between parallel and perpendicular lines standing alone or within figures.
- Identifying plane figures, open figures, and closed figures.
- Identifying polygons.
- Naming figures such as a quadrilateral, square, rectangle, trapezoid, rhombus, parallelogram, pentagon, hexagon, and octagon.
- Recognizing the attributes of a quadrilateral, rhombus, parallelogram, pentagon, hexagon, and octagon.
- Identifying symmetrical and congruent figures.

For all learning objectives above, students will demonstrate understanding in a scaffolded manner, transitioning from verbal response to selected response to open-ended response and performance tasks.

Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
<p style="text-align: center;">A/M/T</p> <p>Acquisition</p> <p>Meaning Making</p> <p>Transfer</p>	<p><i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i></p>	<p>PERFORMANCE TASK(S) <i>Students will demonstrate understanding (meaning-making and transfer) through complex performance by...</i></p> <ul style="list-style-type: none"> • Performance Assessment Unit 5 – Building Stadium • Students will name, classify, and draw figures. • Goal: Your task is to analyze geometric figures. • Role/Audience: Building A Stadium • Situation/Product: You will label and draw specific real-life elements related to geometry. • Success Criteria: Your answers must show knowledge of geometry terminology. 	<p>Differentiation Considerations:</p> <p>Read Performance Task to students</p>
<p style="text-align: center;">A/M/T</p> <p>Acquisition</p> <p>Meaning Making</p> <p>Transfer</p>	<p><i>What criteria will be used in each assessment to evaluate attainment of the desired results?</i></p>	<p>OTHER EVIDENCE</p> <ul style="list-style-type: none"> • Math in Focus 2020 Chapter 12 • Teacher Observation • Teacher Created Quizzes • Small group work 	<p>Differentiation Considerations:</p> <p>Small Group reteaching</p> <p>Enrichment/Challenge opportunities</p>