# Geometry – Unit 5: Quadrilaterals

## Phoenixville Area School District

| Stage 1 Desired Results | |
|---|---|
| **PA Core Standards:**<br>CC.2.3.HS.A.13 Analyze relationships between two-dimensional and three-dimensional objects.<br><br>CC.2.3.HS.A.14 Apply geometric concepts to model and solve real-world problems. | ***Transfer*** |
| | TRANSFER GOALS<br>*Students will be able to independently use their learning to…*<br><ul><li>*Problem-Solving:* Persistently apply various problem-solving strategies and organized approaches to accurately understand and solve problems and provide evidence to support response.</li><li>*Mathematical Vocabulary:* Interpret mathematical vocabulary and apply proper terminology to engage in meaningful oral and written expression that communicates mathematical thinking, problem-solving methods, and rationale.</li><li>*Reasoning:* Demonstrate mathematical resilience and conceptual understanding through the use of vocabulary, written expression, graphical representation, and alternate strategies.</li></ul> |
| | ***Meaning*** |
| | UNDERSTANDINGS<br>*Students will understand that…*<br><ul><li>One-, two-, and three-dimensional objects are described, classified, and analyzed by their critical attributes.</li><li>The accurate measurement of space is determined by the ability to visualize the object/problem situation and apply an appropriate algorithm.</li></ul> ESSENTIAL QUESTIONS<br>*Students will keep considering...*<br><ul><li>What are the mathematical attributes of objects or processes and how are they measured or calculated?</li><li>How are spatial relationships, including shape and dimension, used to draw, construct, model and represent real situations or solve problems?</li><li>How do the tools of geometry such as definitions, theorems, and properties foster an increasing ability to spatially visualize and logically deduce conclusions?</li></ul> |

|  |  | **Knowledge and Skills Acquisition** |  |
|---|---|---|---|
|  |  | KNOWLEDGE<br>*Students will know…*<br><ul><li>How to find and use the sum of the measures of the interior and exterior angles of a polygon</li><li>Recognize and apply properties of quadrilaterals</li></ul><br>VOCABULARY<br><ul><li>Midsegment</li><li>Parallelogram</li><li>Trapezoid</li><li>Kite</li><li>Diagonal</li></ul> | SKILLS<br>*Students will be skilled at…*<br><ul><li>Identifying and using the properties of quadrilaterals as shown on a graphic organizer.</li><li>Applying the properties of interior and exterior angles of a polygon through one-step and multi-step open-ended response questions.</li></ul> |

## Stage 2 – Evidence

| Code A/M/T | Evaluative Criteria | Assessment Evidence |  |
|---|---|---|---|
| N/A | N/A | PERFORMANCE TASK(S)<br>*Students will demonstrate understanding (meaning making and transfer) through complex performance by...*<br><br>N/A | Differentiation Considerations: |
| Acquisition<br><br>Meaning Making<br><br>Transfer | Uses mathematics vocabulary and notation concisely and correctly. Chooses effective strategy/strategies for solving the problem.<br>Proves the approach was valid and solution correct through examples/counterexamples.<br>All representations are clear and labeled accurately.<br>Solution is clearly identified; appropriate units are provided. | OTHER EVIDENCE<br><br>**Unit Test**<br><ul><li>Multiple Choice</li><li>True/False</li><li>Open-Ended Response</li><li>Two-Column Proof</li></ul> | Differentiation Considerations: |