Grade 5 Mathematics – Unit 6: Two-Dimensional Figures

Phoenixville Area School District

Stage 1 Desired Results

PA Core Standards:
CC.2.3.5.A.2 - Classify two-dimensional figures into categories based on an understanding of their properties.

PSSA Assessment Anchors:
M05.C-G.2.1 - Use basic properties to classify two-dimensional figures.

Transfer

TRANSFER GOALS

Students will be able to independently use their learning to…

- 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.

Meaning

UNDERSTANDINGS

Students will understand that…

- Mathematics is a language of carefully defined terms and symbols.
- A shape's characteristics (dimensionality, side measures, angle measures, faces, edges, area, perimeter, and volume) are used for identification.
- Points, lines, and planes are the building blocks of geometry.

ESSENTIAL QUESTIONS

Students will keep considering...

- What is the appropriate degree of precision for this particular data and solution?
- How are geometric shapes and objects measured/classified/compare?
- How can we use attributes and properties to solve problems?

Knowledge and Skills Acquisition

KNOWLEDGE

Students will know…

- Polygons are 2D figures that can be classified based on their properties.
- 2D figures can have multiple classifications based on a hierarchy of specificity.
- 2D figures are identified based on the attributes of their sides and their angle measures.

SKILLS

Students will be skilled at…

- Identifying polygons based on their properties (number of sides, pairs of parallel sides, angle size) in multiple-choice, or open-ended format.
- Classifying polygons using a hierarchy of names, and determining the most specific name for a figure in an open-ended format, or when filling in a hierarchy chart.

	• Parallel lines are lines that are equidistant from each other at all points. • Triangles are classified by their sides AND angles. VOCABULARY • Hierarchy • Polygon • Properties • Classify • Parallelogram • Quadrilateral	• Identifying how many pairs of parallel sides are included on a figure in order to classify that figure. • Classifying triangles with a side-based name as well as an angle-based name.

Stage 2 – Evidence

Code A/M/T	Evaluative Criteria	Assessment Evidence	
A/M/T Acquisition Meaning Making Transfer	*What criteria will be used in each assessment to evaluate attainment of the desired results?*	PERFORMANCE TASK(S) *Students will demonstrate understanding (meaning-making and transfer) through complex performance by...* **Math In Focus Performance Task** • Identify polygons based on properties • Pages 143-145 in student edition **Sorting Shapes Performance Task** Students identify and sort 2D figures based on attributes such as parallel sides and lines of symmetry. • *Goal:* Your task is to recognize, draw, sort, and classify 2D figures. • *Success Criteria:* You will be graded based on the attached rubric.	Differentiation Considerations: [Work on this section after completing Stages 1-2 of all units]
A/M/T Acquisition	All necessary work is shown with no missing information/skipped steps.	OTHER EVIDENCE **Polygon Hierarchy Fill-In Chart** • Open-Ended	Differentiation Considerations: [Work on this section after

Meaning Making Transfer	Uses mathematics vocabulary and notation concisely and correctly.	**Unit Test** – *See Chapter 8 MIF Test* • Multiple Choice • Short Answer • Open-Ended Response **Canvas Math in Focus Chapter 8 Test** – Shared to Commons • Search “Math in Focus: 5th Grade Chapter 8 Test 2020-2021"	completing Stages 1-2 of all units]