PRINCETON INDEPENDENT SCHOOL DISTRICT	**Campus:** Lacy/Smith/Godwin/Harper/Lowe	
Author(s): Elsbury, Garlington, Stovall, Eaton, Warren, Venters	**Date Created / Revised: July 30, 2020**	
Six Weeks Period: 1st	**Grade Level & Course: 5th grade math**	
Timeline: 5 days	**Unit Title: Two Dimensional Figures**	**Week 4**

Stated Objectives: **TEK # and SE**	**Problem Solving** 5.1A apply mathematics to problems arising in everyday life, society, and the workplace; 5.1B use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 5.1D communicate mathematical ideas, reasoning, including symbols, diagrams, graphs, and language as appropriate. 5.1 E create and use representations to organize, record, and communicate mathematical ideas. 5.1F analyze mathematical relationships to connect and communicate mathematical ideas. 5.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications **Skills** 5.2B compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or = **Review** 5.3K Add and subtract positive rational numbers fluently. **Concept** 5.5A Classify two-dimensional figures by attributes and properties. **ELPS** http://www.teksresourcesystem.net/module/standards/Tools/Browse?StandardId=118094
See Instructional Focus Document (IFD) for TEK Specificity	
Key Understandings	Graphic organizers can be used to display a hierarchy of sets and subsets of two-dimensional figures based on their attributes and properties.
Misconceptions	**Misconceptions:** ● Some students may think that polygons have to be regular (congruent angles and sides) rather than being defined by the number of straight, closed lines. ● Some students may think that a rhombus and square are always different shapes rather than thinking a square is always a rhombus, but a rhombus is not always a square. ● Some students may think that squares are not rectangles rather than thinking that squares are rectangles that have four congruent sides. ● Some students may think that two triangles put together always make a rectangle rather than thinking about how some triangles are acute or obtuse and cannot make a rectangle. ● Some students may think the definition of area is length times width rather than thinking of area as the two-dimensional space a figure occupies. ● Some students may think volume of liquid and solids mean different things rather than understanding they are both measuring the three-dimensional space an object occupies.

	● Some students may think that the volume of solids are measured with units that only measure liquids (e.g., milliliter, liter, gallon, etc.) rather than thinking about cubic units. ● Some students may think that a taller shape results in a greater volume rather than considering all of the dimensions to determine its volume. **Underdeveloped Concepts:** ● Some students may only recognize standard shapes if held the "correct" way rather than from any orientation. ● Some students may not recognize that triangles can be sorted by either their angles (e.g. right, obtuse, or acute) or sides (e.g., equilateral, isosceles, or scalene). ● Some students may not recognize that figures can be sorted by more than one attribute. ● Some students may not recognize that figures can be classified in more than one category. ● Some students may not understand the similarities or difference between volume and capacity.
Key Vocabulary	● **Acute** – an angle that measures less than 90° ● **Angle** – two rays with a common endpoint (the vertex) ● **Angle congruency marks** – angle marks indicating angles of the same measure ● **Area** – the measurement attribute that describes the number of square units a figure or region covers ● **Attributes of two-dimensional figures** – characteristics that define a geometric figure (e.g., sides, vertices, etc.) ● **Bases of a rectangular prism** – any two congruent, opposite, and parallel faces shaped like rectangles; exactly 3 possible sets ● **Classify** – applying an attribute to categorize a sorted group ● **Congruent** – of equal measure, having exactly the same size and same shape ● **Conversion** – a change from one measurement unit to another measurement unit without changing the amount ● **Edge** – where the sides of two faces meet on a three-dimensional figure ● **Face** – a flat surface of a three-dimensional figure ● **Height of a rectangular prism** – the length of a side that is perpendicular to both bases ● **Irregular Figure** – a polygon with sides and/or angles that are not all congruent ● **Obtuse** – an angle that measures greater than 90° but less than 180° ● **Perimeter** – a linear measurement of the distance around the outer edge of a figure ● **Polygon** – a closed figure with at least 3 sides, where all sides are straight (no curves) ● **Properties of two-dimensional figures** – relationship of attributes within a geometric figure (e.g., a square has 4 congruent sides and 4 right angles, etc.) and between a group of geometric figures (e.g., a square and a rectangle both have 4 sides and 4 right angles; however, a square has 4 congruent sides but a rectangle has only opposite sides congruent; etc.) ● **Regular figure** – a polygon with all sides and angles congruent ● **Right** – an angle (formed by perpendicular lines) that measures exactly 90° ● **Side** – a line segment that forms the boundary of a two-dimensional figure ● **Side congruency marks** – side marks indicating side lengths of the same measure ● **Three-dimensional figure** – a figure that has measurements including length, width (depth), and height ● **Two-dimensional figure** – a figure with two basic units of measure, usually length and width ● **Vertex (vertices) in a three-dimensional figure** – the point (corner) where three or more edges of a three-dimensional figure meet

	● **Vertex (vertices) in a two-dimensional figure** – the point (corner) where two sides of a two-dimensional figure meet ● **Volume** – the measurement attribute of the amount of space occupied by matter	
Suggested Day 5E Model	**Instructional Procedures** **(Engage, Explore, Explain, Extend/Elaborate, Evaluate)**	**Materials, Resources, Notes**
Day 1- Engage/ Explore	Warm-Up (2 problem solving problems) Skills – Patterns Practice Review – 4 digit addition/subtraction practice Activity 1 – Reviewing two dimensional figures ***TEK 3K Low on STAAR – reinforce** ***TEK 5A Low on STAAR - reinforce**	**From Sharon Wells Curriculum** ● **WP 5A & 5B** ● **Skills 5** ● **Review 5** ● **Activity 1**
Day 2 – Explain/ Extend	Warm-Up (2 problem solving problems) Skills – Relationships Practice Review 2 – 5 digit addition/subtraction practice Activity 2 – Properties of quadilaterals ***TEK 3K Low on STAAR – reinforce** ***TEK 5A Low on STAAR - reinforce**	**From Sharon Wells Curriculum** ● **WP 6A & 6B** ● **Skills 6** ● **Review 6** ● **Activity 2**
Day 3 - Extend	Warm-Up (2 problem solving problems) Skills – Practice Review 3 – 6 digit addition/subtraction practice Activity 3 – Classifying quadrilaterals practice ***TEK 3K Low on STAAR – reinforce** ***TEK 5A Low on STAAR - reinforce**	**From Sharon Wells Curriculum** ● **WP 7A & 7B** ● **Skills 7** ● **Review 7** ● **Activity 3**
Day 4 –Extend	Warm-Up (2 problem solving problems) Skills 4 – Practice Review 4 – 7 digit addition/subtraction practice Activity 4 – Quadrilateral practice ***TEK 3K Low on STAAR – reinforce** ***TEK 5A Low on STAAR - reinforce**	**From Sharon Wells Curriculum** ● **WP 8A & 8B** ● **Skills 8** ● **Review 4** ● **Activity 4**
Day 5-Evaluation	Students will complete Week 1 Assessment.	**From Sharon Wells** ● **Week 2 Assessment**

Accommodations for Special Populations	**Accommodations for instruction will be provided as stated on each student's (IEP) Individual Education Plan for special education, 504, at risk, and ESL/Bilingual.**