

CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS Adopted June 2019		
UNIT OF STUDY: Properties of Polygons and Polyhedra	COURSE/GRADE: Applied Geometry	# WEEKS: 6
Module 4		
<p>Focus (emphasis) Standards/EC: G.1.2.1.1 Identify and/or use properties of triangles. CC.2.3.8.A.2 Understand and apply congruence, similarity, and geometric transformations using various tools. CC.2.3.HS.A.3 Verify and apply geometric theorems as they relate to geometric figures. CC.2.3.HS.A.13 Analyze relationships between two-dimensional and three-dimensional objects. G.1.2.1.2 Identify and/or use properties of quadrilaterals. G.1.2.1.3 Identify and/or use properties of isosceles and equilateral triangles. G.1.2.1.4 Identify and/or use properties of regular polygons. G.1.2.1.5 Identify and/or use properties of pyramids and prisms.</p>	<p>Technology/manipulatives: Chromebook Smart board Electronic text book calculator Ruler 3 D figures Nets Dice CAD program Online videos for reinforcement Studyzone.org Studyisland Firstinmath National Library of Virtual Manipulatives Graph paper</p>	
<p>Important (reinforced) Standards/EC: All items listed above to be reinforced throughout year. Tools of Geometry, reasoning and logic statements, congruent triangles, two lines cut by transversal</p>	<p>Reading, writing, speaking strategies: Word problems, journal writing, bell ringers, partner sharing, think aloud, paraphrasing, board work, sharing out to class, note taking skills development</p>	
<p>Vocabulary: regular polygon, slope, distance formula, midpoint formula, Pythagorean Theorem, altitude of triangle, centroid, circumcenter, circumscribed, concurrent, contrapositive, incenter, inscribed, median, midsegment, negation, orthocenter, point of concurrency, trapezoid, isosceles trapezoid, kite, parallelogram, rectangle, rhombus, square, altitude, bases, edge, face, height</p>	<p>Questioning and discussion techniques: Real world problems/applications, bell ringers, exit tickets, journals, Frayer model, small group tasks</p>	

<p>Real life application: graphic design, maps, sports equipment, tool design, optics, engineering, Construction, roof truss, height of items in distance, airline industry, architecture, astronomy, traffic signs, manufacturing, amusement parks, Career connections: www.xpmath.com/careers/lite.php</p>	<p>Performance assessment: quiz, test, Studyisland, 3D construction projects, homework, group discussion, self-generated 3D figures</p>
<p>Computation: One step algebraic equations Two step algebraic equations Ratio and proportions Pythagorean theorem Slope, distance, midpoint Area of various shapes</p>	<p>Accommodations/adaptations: Limiting , homework problems, guided problem solving, peer groups, tutorial time, needs based on IEP</p>
<p>SAS Module Resources: http://www.pdesas.org/standard/PACore</p>	