CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS Adopted April 2019		
UNIT OF STUDY: Congruence, Similarity, and Proofs	COURSE/GRADE: Applied Geometry	# WEEKS: 6
Module 2		
Focus (emphasis) Standards/EC: **G.1.3.1.1** Identify and/or use properties of congruent and similar polygons or solids. **G.1.3.1.1** Identify and/or use properties of congruent and similar polygons or solids. **G.1.3.2.1** Write, analyze, complete, or identify formal proofs **CC.2.3.HS.A.1** Use geometric figures and their properties to represent transformations in the plane. **CC.2.3.HS.A.2** Apply rigid transformations to determine and explain congruence. **CC.2.3.HS.A.5** Create justifications based on transformations to establish similarity of plane figures. **CC.2.3.HS.A.6** Verify and apply theorems involving similarity as they relate to plane figures. **CC.2.2.HS.C.9** Prove the Pythagorean identity and use it to calculate trigonometric ratios. **CC.2.3.HS.A.3** Verify and apply geometric theorems as they relate to geometric figures. **CC.2.3.HS.A.6** Verify and apply theorems involving similarity as they relate to plane figures. **CC.2.3.HS.A.8** Apply geometric theorems to verify properties of circles.	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	

Important (reinforced) Standards/EC: All items listed above to be reinforced throughout year.	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
Vocabulary: inductive/deductive reasoning, counter example, midpoint, nets, angle bisector, point, parallel lines, perpendicular lines, ray, segment, planes, perimeter, circumference, area, isosceles triangle, conditional, biconditional, congruence, SSS, SAS, ASA, AAS, AAA, HL, CPCTC, ratio, proportion	Questioning and discussion techniques: Real world problems/applications, bill ringers, exit tickets, journals, Frayer model, small group tasks
Real life application: Construction, roof truss, height of items in distance, airline industry, architecture, astronomy, traffic signs, farming equipment, amusement parks, Career connections: www.xpmath.com/careers/lite.php	Performance assessment: quiz, test, Studyisland, projects, homework, group discussion
Computation : One step algebraic equations Two step algebraic equations	Accommodations/adaptations: Limiting , homework problems, guided problem solving, peer groups, tutorial time, needs based on IEP
SAS Module Resources: http://www.pdesas.org/standard/PACore	