CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS—Module 2		
UNIT OF STUDY: Congruence	**COURSE/GRADE:** Grade 8	**# WEEKS:** 20 days

Focus (emphasis) Standards/EC **CC.2.3.8.A.2** Understand and apply congruence, similarity, and geometric transformations using various tools. **M08.C-G.1.1** Apply properties of geometric transformations to verify congruence or similarity **M08.C-G.1.1.1** Identify and apply properties of rotations, reflections, and translations. Example: Angle measures are preserved in rotations, reflections, and translations. **M08.C-G.1.1.2** Given two congruent figures, describe a sequence of transformations that exhibits the congruence between them. **M08.C-G.1.1.3** Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. **CC.2.3.8.A.3** Understand and apply the Pythagorean Theorem to solve problems **M08.C-G.2.1** Solve problems involving right triangles by applying the Pythagorean theorem. **M08.C-G.2.1.1** Apply the converse of the Pythagorean theorem to show a triangle is a right triangle. **M08.C-G.2.1.2** Apply the Pythagorean theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions. (Figures provided for problems in three dimensions will be consistent with Eligible Content in grade 8 and below.) **M08.C-G.2.1.3** Apply the Pythagorean theorem to find the distance between two points in a coordinate system.	**Technology/manipulatives** Calculators, Smartboard, Study Island, rulers, white boards, highlighters, colored pencils
Important (reinforced) Standards/EC	**Reading, writing, speaking strategies**

	Journaling, read aloud, persuasive/informational/expository writing, graphic organizers, Frayer model, lecture, cooperative learning, board work, demonstration, Think-Pair-Share, note-taking, crossword puzzles
Vocabulary Converse, deductive reasoning, distance formula, exterior angles, hypotenuse, inductive reasoning, interior angles, legs, Pythagorean Theorem, regular polygon, remote interior angles, triangle, right triangle, angle of rotation, center of dilation, congruent, dilation, image, line of reflection, preimage, reflection, rotation, rotational symmetry, transformation, translation	**Questioning and discussion techniques** Bellringers, Exit tickets, discovery, small/large groups, peer tutoring, games, homework review, dry erase boards
Real life application Building constructions	**Performance assessment** Test, Quiz, Performance Task, Homework, Projects, Notebooks, Study Island
Computation Operations involving real numbers	**Accommodations/adaptations** Differentiation strategies, small group instruction, cooperative learning, guided practice, peer tutoring, limited problems/choices, manipulatives and models, clarity checks, diagrams and graphs
SAS Module Resources www.pdesas.org: *Grade 8 Mathematics Assessment Anchors and Eligible Content *Mathematics Glossary *PA Core Mathematics, Grades PreK-12 *PA Standards Instructional Frameworks: Math (Go to Teacher Tools then Curriculum Mapping)	

*Math Cluster Matrix – Tri-folds 6-7-8	