CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS		
UNIT OF STUDY: Coordinate Geometry and Right Triangles	COURSE/GRADE: Geometry	# WEEKS:

Focus (emphasis) Standards/EC **G.2.1.1.1** Use the Pythagorean theorem to write and/or solve problems involving right triangles. **CC.2.2.HS.C.9** Prove the Pythagorean identity and use it to calculate trigonometric ratios. **CC.2.3.HS.A.7** Apply trigonometric ratios to solve problems involving right triangles. **G.2.1.1.2** Use trigonometric ratios to write and/or solve problems involving right triangles. **G.2.1.2.1** Calculate the distance and/or midpoint between two points on a number line or on a coordinate plane. **CC.2.3.8.A.3** Understand and apply the Pythagorean theorem to solve problems. **CC.2.3.HS.A.11** Apply coordinate geometry to prove simple geometric theorems algebraically. **G.2.1.2.2** Relate slope to perpendicularity and/or parallelism (limit to linear algebraic equations). **G.2.1.2.3** Use slope, distance, and/or midpoint between two points on a coordinate plane to establish properties of a two-dimensional shape.	Technology/manipulatives I pad Smart board Electronic text book Ruler 3 D figures Nets Dice 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

Vocabulary: alternate interior angles, alternate exterior, same side interior angles, same side exterior, corresponding angles, equiangular triangle, equilateral, exterior angle, polygon, regular polygon, remote interior angles, transversal, parallel lines, perpendicular lines, slope, distance formula, midpoint formula,	Questioning and discussion techniques: Real world problems/applications, bill ringers, exit tickets, journals, Frayer model
Real life application Construction, roof truss, height of items in distance 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
SAS Module Resources: http://www.pdesas.org/standard/PACore	