CONNEAUT AREA SCHOOL DISTRICT		
MATHEMATICS		
UNIT OF STUDY: Addition and multiplication with volume and area	COURSE/GRADE: 5	# WEEKS: 6
• MODULE 5		

Focus (emphasis) Standards/EC:
CC.2.3.5.A.2 – Classify two-dimensional figures into categories based on understanding of their properties
-Eligible Content:
   *M05.C-G.2.1.1: classify 2D figures in a hierarchy based on properties
(All polygons have a t least 3 sides, and pentagons are polygons, so all pentagons have at least 3 sides.   A rectangle is a parallelogram, which is a quadrilateral, which is a polygon; SO, a rectangle can be classified as a parallelogram, as a quadrilateral, and as a polygon.)

CC.2.3.5.A.5 – intentionally blank

Technology/manipulatives:
(see Grade 5 Module 5 attachment for examples of usage)

For Measurement/Volume:
Cubes, rulers(marked in standard or metric units), grid papers :
http://illuminations.nctm.org?ActivityDetail.aspx?ID=6

For 2D shapes:
Sets of 2D shapes; graphic organizers such as T-charts (compare and contrast attributes); rectangles and parallelograms.
http://illuminations.nctm.org/LessonDetail.aspx?ID=L270

Frayer Model graphic organizer (note-taking)

Dry-erase boards, eno-board

studyzone.org (resources and interactive practice)
www.studyisland
www.firstinmath.com
xpmath.com

Important (reinforced) Standards/EC:

There are no standards currently aligned to this resource

Reading, writing, speaking strategies:
Journaling, read aloud, lecture, word problems, persuasive/informational/expository writing, graphic organizers, Frayer model, cooperative learning, board work, demonstration, Think-Pair-Share, note-taking, crossword puzzles, , bell-ringers

Vocabulary:
Attribute, congruent, lateral face, parallel lines, perpendicular lines;
acute, right, obtuse, equilateral, scalene, isosceles triangle;
polygons: regular polygon, quadrilateral, pentagon, hexagon, heptagon, octagon, nonagon, decagon, parallelogram, rectangle, rhombus, trapezoid;

Questioning and discussion techniques:
Bell-ringers; exit tickets; journals; Frayer Model; highlighting key terms; small group/ whole group; demonstrations; homework review; dry-erase checks

solid figures/three-dimensional figures: prism, pyramid, right rectangular prism, pentagonal prism, pentagonal pyramid, hexagonal prism, octagonal prism, decagonal prism; measurement systems, measurement unit volume, unit cube	
Real life application: Career options: http://www.xpmath.com/careers/topicsresult.php?subjectID=3&topicID=14	**Performance assessment:** http://www.sandi.net/Page/62252
Computation: Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems **given the appropriate formula** Classify 2D figures in a hierarchy based on properties	**Accommodations/adaptations:** Agendas, 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: pdesas.org *Teacher Tools-Curriculum Mapping-Instructional Frameworks Math-PA Standards: Focus and Important Standards * Math Cluster Matrix grades 4,5,6 (prior and future learning)	