

CONNEAUT AREA SCHOOL DISTRICT MATHEMATICS- Unit 2		
UNIT OF STUDY: Unit Conversions: Addition and Subtraction of Length, weight, Liquid Volume, Area, and Perimeter, Intervals of Time	COURSE/GRADE: 4	# WEEKS: 4 (20 days)
<p>Focus (emphasis) Standards/EC CC.2.4.4.A.1-Solve problems involving measurement and conversions from a larger unit to a smaller unit</p> <p><b>Eligible Content</b> M04.D-M.1.1 through M04.D-M.1.1.4 M04.D-M.1.1.1 Know relative sizes of measurement units within one size of units including standard units (in., ft, yd, mi; oz., lb; c, pt, qt, gal), metric units (cm, m, kg; g, kg; mL, L), and time (sec, min, hr, day, wk, mo, yr). Within a single system of measurement, express measurements in larger unit in terms of a smaller unit. A table of equivalences will be provided.</p> <p>M04.D-M.1.1.2 Use the four operations to solve word problems involving distances, intervals of time (such as elapsed time), liquid volumes, masses of objects; money, including problems involving simple fractions or decimals; and problems that require expressing measurements given in a larger unit in terms of a smaller unit.</p> <p>M04.D-M.1.1.3 Apply the area and perimeter formulas for rectangles in real-world and mathematical problems (may include finding a missing side length). Whole numbers only. The formulas will be provided</p> <p>M04.D-M.1.1.4 Identify time (analog or digital) as the amount of minutes before or after the hour.</p>	<p>Technology/manipulatives Math Grd 4 Mod2_Assessment_Draft 2013.docx (link with sample questions that are relevant to this module) <a href="http://www.youtube.com">www.youtube.com</a> <a href="http://www.studyzone.org">www.studyzone.org</a> (resources and interactive practice) <a href="http://www.studyisland.com">www.studyisland.com</a> <a href="http://www.firstinmath.com">www.firstinmath.com</a> <a href="http://www.illuminations.nctm.org">www.illuminations.nctm.org</a> <a href="http://www.nlvm.usu.edu">www.nlvm.usu.edu</a> <a href="http://illustrativemathematics.org/standards/k8">http://illustrativemathematics.org/standards/k8</a> <a href="http://www.commoncoresheets.com">www.commoncoresheets.com</a></p> <p>table of equivalencies, formula sheet, clocks(analog and digital) &amp; measurement tools</p>	
<p>Important (reinforced) Standards/EC</p> <p>CC.2.1.4.B.2 Use place value understanding and properties of operations to perform multi-digit arithmetic</p> <p>CC.2.2.4.A.1 represent and solve problems involving the four operations</p>	<p><b>Reading, writing, speaking strategies</b> Gallon man, Journaling, Read Aloud – measurement books, graphic organizers, reword problems, articulate/explain mathematical concepts, students teach a concept, turn and talk, highlighting key terms</p>	
<p>Vocabulary Add, area, cm, convert, cup, customary, decimals, distance, divide, equivalent, ft, fractions, gallon, g, hr, in, kg, km, length, liquid volume, liter, mass, measure, meter, metric, mile, mL, minute, multiply, operations, ounce, perimeter, pint, pound, quart, relative size, second, scale, subtract, time, weight, yard</p>	<p><b>Questioning and discussion techniques</b> Stories, songs, cheers, poems, sayings, etc... Bell ringers/exit slips Drawing pictures or using models to help students understand, analyze key terms in multi step word problems to decipher the operation needed to complete the problem</p>	
<p>Real life application</p> <p>Cooking, party planning, scheduling, time management, sewing, gardening, measuring the building or other objects in the school, building purposes</p>	<p><b>Performance assessment</b> Fair Play <a href="http://www.insidemathematics.org">www.insidemathematics.org</a> (asks students to find area and perimeter of rectangles while understanding how they can be the same but can also be different)</p>	

	<p>Length of Ants &amp; Objects in my desk <b>Line Plots</b>  <a href="http://www.k-5mathteachingresources.com">www.k-5mathteachingresources.com</a>  Capacity Creatures  Same website as line plots</p>
<p><b>Computation</b>  *Mental math with basic facts  *Adding, subtracting, multiplying and dividing to solve word problems involving distances, intervals of time, liquid volumes, masses of objects and money  *Apply formulas to solve for area and perimeter  *Transfer info from one type of display to another (table, chart, bar graph, or pictograph)  *Identifying time as amount of minutes before or after an hour  *make a line plot and display data (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, or <math>\frac{1}{8}</math>)  *know relative sizes of measurement units within one system of units including standard units (in, ft., yd, mi, oz, lb, c, pt, qt, gal) and time (sec, min, hr, day, wk, mo, yr)  *Check answers for reasonableness</p>	<p><b>Accommodations/adaptations</b>  Multiplication chart, number line, Learning contracts, small group, learning centers, scaffolding, agendas, demonstrations, using notes or journals</p>
<p><b>SAS Module Resources</b>  <a href="http://www.pdesas.org">www.pdesas.org</a>  Login and click teacher tools in top right corner  Click Curriculum mapping  Or to compare standards/eligible content/CC -  Click on standards then click on PA Core and go to PA Core Crosswalks or go to PA Core Eligible content</p>	<p>*Grade 4 Mathematics Assessment Anchors and Eligible Content  *Mathematics Glossary  *PA Core Mathematics, Grades PreK-12  *PA Standards Instructional Frameworks: Math  *Cluster Heading Matrix – Tri-fold Grades 3-4-5</p>