

## Curriculum Map

Course Title: Math

Grade: 4<sup>th</sup>

<b>Unit (Name/Number):</b> Measurement, Data and Probability	<b>Pacing:</b> Refer to RCC pacing guide
<b>Essential Question(s):</b> How do you solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit? How do you represent and interpret data?	

Content/Key Concepts (Eligible Content)	Standards	Key Vocabulary	Learning Activities/Resources	Evidence of Learning (Assessments; Performance Tasks)
<p><b><u>Measurement Units and Conversions</u></b> <b><u>and</u></b> <b><u>Solving Measurement Problems</u></b> <b>M04.D-M.1.1.1</b> Know relative sizes of measurement units within one system of units including standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A table of equivalencies will be provided. Example 1: Know that 1 kg is 1,000 times as heavy as 1 g. Example 2: Express the length of a 4-foot snake as 48 in.</p> <p><b>M04.D-M.1.1.2</b> 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><b>M04.D-M.1.1.3</b> Apply the area and perimeter formulas for rectangles in</p>	<p><b><u>Common Core</u></b> 4.MD.1, 4.MD.2,4.MD.3, 4.MD.4</p> <p><b><u>PA Core</u></b> <b><u>Standards</u></b> CC.2.4.4.A.1 CC.2.4.4.A.4</p>	<p><b>Imperative to use exact vocabulary:</b></p> <ul style="list-style-type: none"> <li>• convert</li> <li>• metric system</li> <li>• customary system</li> <li>• liquid volume</li> <li>• mass</li> <li>• formula</li> <li>• perimeter</li> <li>• area</li> </ul>	<p><b>*use calculators at teacher's discretion</b></p> <p><b>Lesson 23:</b> Convert Measurements (S/A) <b>Lesson 24:</b> Time and Money (S/A) <b>Lesson 25:</b> Length, Liquid, Volume, and Mass (S/A) <b>Lesson 26:</b> Perimeter and Area (S/A) <a href="#">Sample Assessment Questions</a> <a href="#">SAS Materials/Resources</a></p>	<p><b><u>Assessment Options:</u></b> RCC Quizzes RCC Mid-Unit Assessments RCC Interim Assessment</p> <p><b><u>District Requirement:</u></b> RCC Unit Assessments</p> <p><b><u>Extension Activities:</u></b> Math in Action <b>*Practice Standard 5: use of calculators appropriate</b></p> <p><b><u>Practice Standards:</u></b></p> <p><b>Convert Measurements</b> 2,5,6,8</p> <p><b>Time and Money</b> 1,2,3,4,5,6</p> <p><b>Length, Liquid Volume, and Mass</b> 1,2,4,5,6</p> <p><b>Perimeter and Area</b> 1,2,4,5,6,7</p> <p><b>Line Plots</b> 2,4,5,6,7</p>

<p>real-world and mathematical problems (may include finding a missing side length). Whole numbers only. The formulas will be provided.</p> <p><b>M04.D-M.1.1.4</b> Identify time (analog or digital) as the amount of minutes before or after the hour. Example 1: 2:50 is the same as 10 minutes before 3:00. Example 2: Quarter past six is the same as 6:15.</p> <p><u>Line Plots</u></p> <p><b>M04.D-M.2.1.1</b> Make a line plot to display a data set of measurements in fractions of a unit (e.g., intervals of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, or <math>\frac{1}{8}</math>).</p> <p><b>M04.D-M.2.1.2</b> Solve problems involving addition and subtraction of fractions by using information presented in line plots (line plots must be labeled with common denominators, such as <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math>, <math>\frac{3}{4}</math>).</p> <p><b>M04.D-M.2.1.3</b> Translate information from one type of display to another (table, chart, bar graph, or pictograph).</p> <p><u>Angles</u></p> <p><b>M04.D-M.3.1.1</b> Measure angles in whole-number degrees using a protractor. With the aid of a protractor, sketch angles of specified measure.</p> <p><b>M04.D-M.3.1.2</b> Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems. (Angles must be adjacent and non-overlapping.)</p>	<p><u>Common Core</u> 4.MD.6, 4.MD.7, 4.MD5</p> <p><u>PA Core Standards</u> CC.2.4.4.A.6</p>	<ul style="list-style-type: none"> <li>• line plot</li> </ul> <p><b>Imperative to use exact vocabulary:</b></p> <ul style="list-style-type: none"> <li>• angle</li> <li>• ray</li> <li>• vertex</li> <li>• degree</li> <li>• right angle</li> <li>• obtuse angle</li> <li>• acute angle</li> <li>• protractor</li> <li>• compose</li> <li>• decompose</li> </ul>	<p><b>Lesson 27: Line Plots (S/A)</b> <a href="#">Sample Assessment Questions</a> <a href="#">SAS Materials/Resources</a></p> <p><b>Lesson 28: Understand Angles (S/A)</b> <b>Lesson 29: Measure and Draw Angles (S/A)</b> <b>Lesson 30: Add and Subtract with Angles (S/A)</b> <a href="#">Sample Assessment Questions</a> <a href="#">SAS Materials/Resources</a></p>	<p><b>Understand Angles</b> 6,7</p> <p><b>Measure and Draw Angles</b> 2,3,5,6</p> <p><b>Add and Subtract with Angles</b> 1,2,3,4,5,6</p>
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