

<b>Grade: 4</b> <b>Subject:</b> Mathematics	<b>Unit 12: The US Customary System</b>
<b>Big Idea/Rationale:</b>	<ul style="list-style-type: none"> <li>• In this unit students build on their understanding of measuring distance, area, volume, weight, capacity, time, and temperature using the customary system. They will apply the skills to real-world situations and develop their abilities to estimate a variety of measurements and to use this information to solve problems.</li> </ul>
<b>Enduring Understanding (Mastery Objective):</b>	<p>Students will understand that:</p> <ul style="list-style-type: none"> <li>• Some measurements can be approximated using known references as the unit in the measurement process?</li> <li>• Everyday objects have a variety of attributes, each of which can be measured in many ways.</li> <li>• What we measure affects how we measure it.</li> <li>• Measurement can be used to describe, compare, and make sense of phenomena.</li> </ul>
<b>Essential Questions (Instructional Objective):</b>	<ul style="list-style-type: none"> <li>• How can measurement be used to solve a problem?</li> <li>• How do you estimate the area and capacity of objects and figures?</li> <li>• What customary units describe how much a container holds?</li> <li>• How do you measure to the fraction of an inch?</li> <li>• How can you estimate and measure length?</li> <li>• What customary units describe how heavy something is?</li> <li>• How can you measure the passing of time?</li> <li>• What is used to measure temperature?</li> </ul>
<b>Content (Subject Matter &amp; Learning Objectives):</b>	<ul style="list-style-type: none"> <li>• Apply knowledge of customary units of length and distance.</li> <li>• Write fractions of units of length and distance.</li> <li>• Apply customary units of square and cubic measurement to real-world measuring experiences.</li> <li>• Understand and use customary units of weight.</li> <li>• Understand everyday measurement with ounces, cups, pints, quarts, and gallons.</li> <li>• Apply fractions of units of capacity in measurement tasks.</li> <li>• Understand fractional parts of hours and word representations of those parts.</li> <li>• Review elapsed time and the meaning of temperature readings.</li> </ul>
<b>Standards</b>	<ul style="list-style-type: none"> <li>• <b>4MD.A.1:</b> Knowing relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table.</li> <li>• <b>4MD.A.2:</b> Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money,</li> </ul>

	<p>including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p> <ul style="list-style-type: none"><li>• <b>4MD.A.3:</b> Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</li><li>• <b>Mathematical Practices</b></li></ul>
<b>Materials and Resources</b>	<ul style="list-style-type: none"><li>• Math Expressions, Student Journals, Manipulatives, Math themed literature, BrainPop, IXL Mathematics</li></ul>