

Grade 2 Mathematics	Unit 14 – Non-Standard and Standard Units of Measure
Big Idea/Rationale:	<p>In Unit 14, children explore measurement concepts and propose non-standard units for length, mass, capacity, and time. After exploring non-standard units, students move to measuring with customary units. Activities include making and using a yardstick and converting between yards, feet, and inches. Children have opportunities to measure length, time, capacity, weight, mass, and temperature in metric and customary units. Activities include finding referents, converting between units, and selecting appropriate tools and units.</p>
Enduring Understandings:	<ul style="list-style-type: none"> • Some measurements can be approximated using known referents as the unit in the measurement process. • Specific tools measure specific attributes. • The choice of measurement tools depends on the measurable attributes and the degree of precision desired. • A measurement must contain a number and a unit. • Standard units provide common language • Line Plots can be used to organize data.
Essential Questions:	<ul style="list-style-type: none"> • Which measuring tool would make no sense to use when measuring milk? Why? • How can you measure the length of your desk without using a ruler? What else would work? • What problem would we have if we didn't have a standard unit of measurement? • How does <u>what</u> we measure change <u>how</u> we measure?
Lesson Objectives:	<ul style="list-style-type: none"> • Explore non-standard units. • Estimate and measure in inches. • Measure in feet and yards. • Select the best customary unit to measure a specific length. • Use a line plot to organize length measurements to the nearest whole number unit. • Convert between inches, feet, and yards. • Select proper measurement tools to be used for a given situation. • Estimate and measure with cups, pints, quarts and gallons. • Estimate ounces and pounds.
Common Core State Standards:	<ul style="list-style-type: none"> • 2.MD.A.1: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. • 2.MD.A.2: Measure the length of an object twice using length units of different lengths for the two measurements: describe how the two measurements relate to the size of the unit chosen. • 2.MD.A.3: Estimate lengths using units of inches, feet, centimeters, and meters.

	<ul style="list-style-type: none"> • 2.MD.A.4: Measure to determine how much longer one object is than another, expressing the length difference in terms of standard length unit. • 2.MD.B.5: Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. • 2.MD.D.9: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. <p>Mathematical Practices</p>
Materials and Resources:	Grade 2 Math Expressions, Math Journals, manipulatives, IXL Mathematics