

**Math Grade 4 Unit 5**  
**Curriculum Unit Planning Template**  
**Canterbury Public Schools**

<b>Subject</b>	Math
<b>Grade Level</b>	4
<b>Unit Title</b>	Multiplicative comparison and measurement
<b>Unit Goals</b>	<p>Students interpret, represent and solve multiplicative comparison problems using an understanding of the relationship between multiplication and division. Use this thinking to convert units of measure within a given system from larger to smaller units</p> <p>Section A Multiplicative Comparison          Analyze, describe, and represent multiplicative comparison situations          Solve one-step and two step problems involving multiplicative comparisons.</p> <p>Section B Measurement Conversion          Convert from larger units to smaller units within a given system of measurement          Solve multi-step problems involving multiplicative comparison and measurement          Understand the relative sizes of kilometers, meters, centimeters, liters, kilogram, grams, pounds and ounces.</p> <p>Section C Let's Put It To Work          Solve multi-step problems involving multiplicative comparison and measurement</p>
<b>Pacing (# of weeks)</b>	4 weeks
<b>Standards by section</b>	4.NBT.B.5, 4.OA.A.1, 4.OA.A.2, 4.OA.A.3 4.MD.A.1, 4.MD.A.2, 4.OA.A.3 4.MD.A.1, 4.MD.A.2, 4.MD.A.3, 4.NBT.B.4, 4.NF.B.4, 4.NF.B.4.c, 4.OA.A.2
<b>Content/Conceptual Knowledge (know)</b>	That measures have smaller parts and a larger measure can be converted to smaller parts of equal size
<b>Skills (be able to do)</b>	Make sense of multiplication as a way to compare quantities Convert units of measure within a given system from larger to smaller units Make additive comparisons- answer "How many more?" "How many times as many?" Use comparative language to attend to precision Compare two quantities in terms of multiplication and to solve multiplicative comparison problems. Interpret and use diagrams where each section represents any quantity Find a missing factor

	<p>Convert measurements within the same system from larger to smaller units</p> <p>Convert customary and metric units of length, mass, and capacity</p> <p>Convert meters to centimeters</p> <p>Solve multi-step problems involving multiplicative comparison and measurement</p>
<b>Essential Questions</b>	How can you use multiplication to compare quantities? Are there methods or strategies that help with comparisons?
<b>Enduring Understandings</b>	<p>Comparing quantities can be done through multiplication</p> <p>1 meter is 100 times as long as 1 centimeter</p> <p>Multiplication is an operation for converting measures within a system</p>
<b>Vocabulary</b>	Times , twice as many.... How many times more .... Centimeter, meter, grams, kilograms,kilometer, 100 times, yards, feet, gallons, quarts, pounds, ounces, cups,
<b>Common Learning Experiences</b>	<p>Students write multiplication equations to express comparisons</p> <p>Lesson 2 Activity 2, Diagrams to solve multiplicative comparison problems</p> <p>Build a length of 1 meter from centimeter grid paper</p> <p>Use multiplication to perform conversions</p> <p>Lesson 8 Activity 1, How long is 1 Kilometer?</p> <p>Create representations and write equations to solve problems</p> <p>Analyze the relationship between the side lengths and perimeters of quadrilaterals, performing unit conversion along the way.</p> <p>Lesson 15, Activity 2, Stone Towers</p>
<b>Assessments</b>	End of unit tests, checkpoints, daily cool downs
<b>Resources</b>	Tape diagrams, connecting cubes, base ten blocks, centimeter grid paper, Times as Many Recording Mat, Pounds and Ounces, Containers of different sizes, rules, yard sticks, pipe cleaners,
<b>Strategies</b>	Use diagrams, explore lengths in metric units within the same system