

**Math Grade 3 Unit 4**  
**Curriculum Unit Planning Template**  
**Canterbury Public Schools**

<b>Subject</b>	Math
<b>Grade Level</b>	3
<b>Unit Title</b>	Relating Multiplication to Division
<b>Unit Goals</b>	<p>Students learn about and use the relationship between multiplication and division, place value understanding, and the properties of operations to multiply and divide whole numbers within 100. Represent and solve two step problems using the four operations.</p> <p>Section A What is Division?  Represent and solve “how many groups?” and “how many in each group?”</p> <p>Section B Relate Multiplication and Division  Understand division as a missing factor problem  Use properties of operations to develop fluency with single digit multiplication facts, and their related division facts</p> <p>Section C Multiplying Larger Numbers  Use properties of operations and place value understanding to develop strategies to multiply within 100 and to multiply one digit numbers by a multiple of 10</p> <p>Section D Dividing Larger Numbers  Use properties of operations , place value understanding, and the relationship between multiplication and division to divide within 100</p>
<b>Pacing (# of weeks)</b>	3 weeks
<b>Standards</b>	3.NBT.A.2, 3. OA.A.2, 3.OA.A.3 3.MD.C.7.c, 3. NBT.A.3, 3.OA.A.2, 3.OA.B.6, 3.OA.C.7, 3.OA.D.9 3.MD.C.7.c, 3 NBT.A.3, 3.OA.A.3, 3. OA .D.8
<b>Content/Conceptual Knowledge (know)</b>	The relationship between multiplication and division Generalize observations about division situations and interpret division expressions without a context Decompose factors assists with multiplication
<b>Skills (be able to do)</b>	Use the relationship between multiplication and division to develop fluency with single digit multiplication and division facts. Reason about the products of two numbers in terms of the area of rectangles whose side lengths represent the

	<p>factors, decomposing side lengths and applying properties of operations along the way.</p> <p>Find the value of a number using base ten place value</p> <p>Perform division in which the quotient or divisor is larger than 10. Apply knowledge of place value, the two interpretations of division and the relationship between multiplication and division to divide large numbers</p> <p>Use the phrases of “how many in each group? And “how many groups” to solve problems.</p> <p>Use the knowledge of number families to determine the missing factor</p> <p>Reason about patterns if <math>4 \times 3 = 12</math>: <math>3 \times 4 = 12</math></p> <p>Decompose factors</p>
<b>Essential Questions</b>	How can knowing the relationship between multiplication and division help with solving one and two step problems?
<b>Enduring Understandings</b>	<p>The relationship between multiplication and division will help to develop fluency with single digit number facts</p> <p>Understanding number families helps with fluency</p> <p>Using the distributive property of multiplication will help with problem solving</p>
<b>Vocabulary</b>	Division, factor , decompose, quotient
<b>Common Learning Experiences</b>	<p>Lesson 4, Activity 3 Stacks of blocks</p> <p>Lesson 7, Activity 1 Division Round Table</p> <p>Lesson 14, Activity 1 A Factor Greater than Ten</p> <p>Lesson 21, Activity 1 Apple Adventure</p>
<b>Assessments</b>	unit assessments, check points, daily cool downs
<b>Resources</b>	Blocks, diagrams , connecting cubes, counters, Card sorts, number cubes
<b>Strategies</b>	<p>Use the structure of the question to try to make scenes of a problem.</p> <p>Decompose factors</p> <p>Strategies based on place value and properties of operations to multiply larger numbers</p> <p>Use various strategies of groupings to solve division problems</p>