

Grade: 4 Unit: 3	Multiplication and Division 2	5 Weeks
---------------------	-------------------------------	---------

Progression	
3 <sup>rd</sup> Grade	Students used equations, arrays and grouping strategies to develop an understanding of multiplication and division. They gained fluency with multiplication and division with 100, knowing products of 1-digit numbers from memory.
4 <sup>th</sup> Grade	<b>Students will continue to use multiplication and division strategies and models to solve for products and quotients, extending to products of two 2-digit numbers, and products <u>and</u> quotients of 4-digit with 1-digit <u>whole</u> numbers.</b> <b><u>Students are not required to master the standard algorithms for multiplication or division in 4<sup>th</sup> grade.</u></b>
5 <sup>th</sup> Grade	Students will extend their understanding of multiplication and division to include decimal numbers. They will be expected to be fluent with the standard algorithm for multiplication by the end of 5 <sup>th</sup> grade.

**STUDENT LEARNING GOALS**

**Mathematics Standards (Appendices A & B)**

**4.NBT.5:** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**4.NBT.6:** Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**MP1:** Make sense of problems and persevere in solving them.

**MP6:** Attend to Precision

Interdisciplinary Standards		Key Vocabulary	
<b>Technology Integration</b> <i>(Appendix C)</i>	<b>21<sup>st</sup> Century Skills</b> <i>(Appendix D)</i>	<b>Dividend</b>	<b>Multiple</b>
IS1. Information Strategies	TCS1. Use of Information	<b>Division</b>	<b>Multiplication</b>
IS2. Information Use	TCS5. Problem Solving	<b>Divisor</b>	<b>Product</b>
		<b>Equation</b>	<b>Quotient</b>
		<b>Factor</b>	<b>Remainder</b>
<b>Enduring Understandings</b>		<b>Essential Questions</b>	
<ul style="list-style-type: none"> <li>I can multiply a 4-digit number by a 1-digit number</li> <li>I can multiply a 2-digit number by a 2-digit number</li> <li>I can divide a 4-digit number by a 1-digit number</li> <li>I can use area models and equations to explain my work</li> </ul>		<ul style="list-style-type: none"> <li>How can I use strategies to find the products or quotients of larger numbers?</li> <li>How can I show my work using a model?</li> </ul>	

Assessment Plan			
<b>Summative Assessment(s)/Performance Based Assessments including 21<sup>st</sup> Century Learning</b>  RCC Interim Assessment, Student p.116-117 RCC Performance Task, Student p. 118		<b>Formative and Diagnostic Assessment(s)</b>  STAR Math Assessment (Fall) RCC Embedded Tasks and Assessments	
Learning Plan Components			
Text	<b>Ready Common Core Mathematics Instruction 4</b> , 2014, Curriculum Associates, ISBN: 978-0-7609-8639-4		
Print	<b>Ready Common Core Mathematics Teacher Resource Book 4</b> , 2014, Curriculum Associates, ISBN: 978-0-7609-8646-2		
Electronic	<a href="http://www.teacher-toolbox.com">www.teacher-toolbox.com</a> <a href="http://www.stratfordmath.wikispaces.com">www.stratfordmath.wikispaces.com</a> <a href="http://www.xtramath.org">www.xtramath.org</a>		
<b>Week 1&amp;2</b>	Students will: <ul style="list-style-type: none"> <li>•</li> </ul>		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 11: Multiply Whole Numbers</u>	Hands-On (p.107, 111, 114) Visual (p.110) Differentiated (p.114) GA At the Circus	CC Practice (p.113) *One Digit by Two Digit Multiplication (w/ and w/o answer bank) *Three Digit by One Digit Multiplication *Four Digit by One Digit Multiplication *Two Digit by Two Digit Multiplication (w/ and w/o answer bank) SF 3-3 SF 5-3, 5-4, 5-5, 5-6 SF 6-5	<a href="#">Teacher-Toolbox</a> (2 Tutorials, 2 Tools for Instruction)
<b>Week 3&amp;4</b>	Students will: <ul style="list-style-type: none"> <li>•</li> </ul>		
Lessons	Tasks / Activities	Worksheets	Technology
<u>RCC Lesson 12: Divide Whole Numbers</u>  <b>**Long Division should <u>not</u> be emphasized as a primary strategy**</b>	Hands-On (p.120, 124) Differentiated (p.124)	CC Practice (p.123) *Division 2 Digit Dividend – No Remainder *Division 2 Digit Dividend – With Remainder *Long Division 3 Digit Dividend – With Remainder ( <b>LD not required</b> ) *Long Division 4 Digit Dividend – With Remainder ( <b>LD not required</b> ) SF 3-6, 3-6, 3-8 SF 7-3	<a href="#">Teacher-Toolbox</a> (2 Tutorials, 1 Tool for Instruction)

<b>Week 5</b>	Students will: <ul style="list-style-type: none"> <li>• Demonstrate mastery of objectives</li> </ul>	
<b>Summative Assessment</b>		<b>Performance Task</b>
RCC Unit 3 Interim Assessment -Student p. 116-117 -Scoring Guide (p. 125)		RCC Unit 3 Performance Task -Student p. 118 -Rubric (p. 126-127)