

Curriculum Map

Course Title: Math

Grade: 3rd

Unit (Name/Number): Algebraic Concepts	Pacing: Refer to RCC Pacing Guide
Essential Question(s): How can the relationship between multiplication and division, including their properties, help me to solve problems?	

Content/Key Concepts (Eligible Content)	Standards	Key Vocabulary	Learning Activities/Resources	Evidence of Learning (Assessments; Performance Tasks)
<p>Represent and solve problems involving multiplication and division</p> <p><u>M03.B-O.1.1.1 Interpret and/or describe products of whole numbers (up to and including 10×10).</u></p> <p>*Example 1: Interpret 35 as the total number of objects in 5 groups, each containing 7 objects. Example 2: Describe a context in which a total number of objects can be expressed as 5×7.</p> <p><u>M03.B-O.1.1.2 Interpret and/or describe whole-number quotients of whole numbers (limit dividends through 50 and limit divisors and quotients through 10).</u> *Example 1: Interpret $48 \div 8$ as the number of objects in each share when 48 objects are partitioned equally into 8 shares, or as a number of shares when 48 objects are partitioned into equal shares of 8 objects each. Example 2: Describe a context in which a number of shares or a number of groups can be expressed as $48 \div 8$.</p>	<p><u>Common Core</u> 3.OA.1, 3.OA.3, 3.OA.5</p> <p><u>PA Core Standards</u> CC.2.2.3.A.1</p>	<p>Imperative to use exact vocabulary</p> <ul style="list-style-type: none"> • multiplication • factors • product • array • Commutative (Order) Property of Multiplication • multiples • Associative (Grouping) Property of Multiplication • division • dividend • divisor • quotient • order of operations • pattern • rule 	<p>Lesson 1: Understand the meaning of multiplication (M)</p> <p>Lesson 4: Understanding the meaning of Division (M)</p> <p>Lesson 6: Multiplication and Division Facts (M)</p> <p>Unit 1: Math in Action: Use Multiplication and Division</p> <p>Lesson 11: Solve One-Step Word Problems Using Multiplication and Division (M)</p>	<p><u>Assessment Options:</u></p> <p>RCC Quizzes RCC Mid-Unit Assessments RCC Interim Assessment</p> <p><u>District Requirement:</u></p> <p>RCC Unit Assessments</p> <p><u>Extension Activities:</u></p> <p>Math in Action</p> <p><u>Practice Standards:</u> Understanding the Meaning of Multiplication 2,3,4</p> <p>Use Order and Grouping to Multiply 2,3,4,7</p> <p>Split Numbers to Multiply 1,2,4,7,8</p> <p>Understand the Meaning of Division 1,2,3,4,6</p> <p>Understand How Multiplication and Division are Connected 2,6</p>

<p>M03.B-O.1.2.1 Use multiplication (up to and including 10×10) and/or division (limit dividends through 50 and limit divisors and quotients through 10) to solve word problems in situations involving equal groups, arrays, and/or measurement quantities. *</p> <p>M03.B-O.1.2.2 Determine the unknown whole number in a multiplication (up to and including 10×10) or division (limit dividends through 50 and limit divisors and quotients through 10) equation relating three whole numbers.</p> <p>*Example: Determine the unknown number that makes an equation true.</p> <p>Understand properties of multiplication</p> <p>M03.B-O.2.1.1 Apply the commutative property of multiplication (not identification or definition of the property). *</p> <p>M03.B-O.2.1.2 Apply the associative property of multiplication (not identification or definition of the property). *</p>	<p><u>Common Core</u> 3.OA.3, 3.OA.4, 3.OA.7</p> <p><u>PA Core Standards</u> CC.2.2.3.A.2</p>		<p>Multiplication and Division Facts 1,2,6,7,8</p> <p>Understand Patterns 2,4,6,7</p> <p>Solve One-Step Word Problems using Multiplication and Division 1,2,3,4,7</p> <p>Model Two-Step Word Problems using the Four Operations 1,2,4,5</p> <p>Solve Two-Step Word Problems using the Four Operations 1,2,3,4,5</p>
		<p>Lesson 2: Use Order and Grouping to Multiply (M)</p> <p>Lesson 3: Split Numbers to Multiply (M)</p> <p>Lesson 5: Understand how Multiplication and Division are connected (M)</p>	

<p>M03.B-O.2.2.1 Interpret and/or model division as a multiplication equation with an unknown factor. Example: Find $32 \div 8$ by solving $8 \times ? = 32$</p> <p>Solve problems involving the four operations, and identify and explain patterns in arithmetic</p> <p><u>M03.B-O.3.1.1 Solve two-step word problems using the four operations (expressions are not explicitly stated). Limit to problems with whole numbers and having whole-number answers.</u> *</p> <p><u>M03.B-O.3.1.2 Represent two-step word problems using equations with a symbol standing for the unknown quantity. Limit to problems with whole numbers and having whole-number answers.</u> *</p> <p><u>M03.B-O.3.1.3 Assess the reasonableness of answers. Limit problems posed with whole numbers and having whole-number answers.</u> *</p> <p><u>M03.B-O.3.1.4 Solve two-step equations using order of operations (equation is explicitly stated with no grouping symbols).</u> *</p> <p><u>M03.B-O.3.1.5 Identify arithmetic patterns (including patterns in the addition table or multiplication table) and/or explain them using properties of operations.</u> * Example 1: Observe that 4 times a number is always even. Example 2: Explain why 6 times a number can be decomposed into three</p>	<p><u>Common Core</u> 3.OA.3, 3.OA.4, 3.OA.7 <u>PA Core Standards</u> CC.2.2.3.A.4</p>		<p>Lesson 7: Understanding Patterns (M)</p> <p>Unit 1: Math in Action: Use Multiplication and Division</p> <p>Lesson 11: Solve One-Step Word Problems Using Multiplication and Division (M)</p> <p>Lesson 12: Model Two-Step Word Problems Using the Four Operations (M)</p> <p>Lesson 13: Solve Two-Step Word Problems Using the Four Operations (M)</p> <p>Unit 3: Math in Action: Use the Four Operations</p>	
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<p>equal addends.</p> <p>M03.B-O.3.1.6 Create or match a story to a given combination of symbols (+, −, ×, ÷, <, >, and =) and numbers. *</p> <p>M03.B-O.3.1.7 Identify the missing symbol (+, −, ×, ÷, <, >, and =) that makes a number sentence true.</p> <p><i>*Link provided to SAS assessment questions</i></p>				
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M = lessons that have a **major emphasis** in the Common Core Standards

S/A = lessons that have **supporting/additional** emphasis in the Common Core Standards