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| **Class** | Math 3  | **Topic** | **Multiplication Using Units of 2 and 3: The Commutativity of Multiplication** | **Lesson** | 6a | **Of** | 10 |

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| **Objective** | Students will:Interpret and understand that factors can be interchanged as the multiplicand and the multiplier.Solve multiplication word problems no matter what the order of the factors is in the expression. |
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| **“I Can” Statement** | I can multiply two factors in any order.I can get the product of two numbers even though I interchange them as multiplicands and multipliers. |

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| **Common Core Standards** | [CCSS.MATH.CONTENT.3.OA.A.1](http://www.corestandards.org/Math/Content/3/OA/A/1/)Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*[CCSS.MATH.CONTENT.3.OA.A.3](http://www.corestandards.org/Math/Content/3/OA/A/3/)Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[CCSS.MATH.CONTENT.3.OA.A.4](http://www.corestandards.org/Math/Content/3/OA/A/4/)Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = \_ ÷ 3, 6 × 6 = ?*.[CCSS.MATH.CONTENT.3.OA.B.5](http://www.corestandards.org/Math/Content/3/OA/B/5/)Apply properties of operations as strategies to multiply and divide. *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)* |

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| **Bell Work** | See Bell Work 1-6a |

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| **Procedures** | 1. Start and lead student discussion related to the bell work.2. Distribute the Guided Notes3. Present lesson or play a video lesson.4. Use an Online Activity if time permitted.5. Distribute Lesson Assignment. |

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| **Assessment** | Bell Work 1-6aAssignment 1-6aExit Quiz 1-6a |

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| **Additional Resources** | See Online Activities |