

## Math & Science Collaborative Lesson Plan

Lesson Title: Teaching three-digit number by two-digit multiplication using the multiplication algorithm.

Unit Learning Target (Standard/Performance Expectation(s)) <b>4.1.F</b> Fluently and accurately multiply up to a three-digit number by one- and two-digit numbers using the standard multiplication algorithm.		
Building Block or Lesson Learning Target: Fluently and accurately multiply up to a three-digit number by one-digit, and two-digit by two-digit numbers.	Student Success Criteria: Demonstration of an understanding of the Multiplication Algorithm process and associated steps.	
Previous Lesson Learning Target: Compare and contrast the Array method, the Partial Product method and the multiplication Algorithm.	A 70 to 80% completion of sample problems assigned	
Target Introduction/ Thinking Question *      Begin with a review of the Performance Expectation and then present a rea- life story problem for student pairs to examine and discuss how they would attempt to solve the problem.		
Lesson Progression (Flow) with Talk-Structures	Anticipated Misconceptions: Multiplying in the 100's place value column.	Formative Task or Question* <i>Designed to elicit student misconception(s)</i> The Story Problem discussion
Performance Expectation review and discussion	Student accuracy in showing of their work	The student demonstrations during guided practice
Presentation of the story problem and guiding questions		
Depending upon student response, build student construction of their own meaning or Direct instruction of the Multiplication Algorithm	Key Terms In Lesson: Algorithm Product Place Value	Sample work of the students
Guided practice through 2 to 3 problems		Group discussions and questioning
Independent practice and "check in" time		Periodic "check ins" with individual students and small groups
Student confidence check and Closure		
Lesson Closure <b>Revisit and review the Performance Expectation 4.1.F and survey students for understanding and confidence with the process.</b>	Exit Task* <b>Choose a preprinted sample problem for the student to successfully solve.</b>	

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<p>Do the Math for the Thinking Question</p> <p>For example:</p> $  \begin{array}{r}  123 \\  \times 56 \\  \hline  615 \\  + 4920 \\  \hline  5,535  \end{array}  $	<p>Anticipated Misconceptions:</p> <p>Student sample story problem creation</p> <p>Understanding the execution process of the algorithm</p> <p>Student process accuracy of integer placement and especially student addition</p>
<p>Instructional Adjustment (if needed)</p> <p><i>Tied to common misconception(s)</i></p> <p>More sample three-digit number by two-digit problems prepared as well as problems of three-digit number by one-digit, and two-digit by two-digit numbers.</p>	

\* Opportunity for formative assessment

Exit Card Activity (Student Choice)