

EnVision Math Unit Lesson Plan			Common Core Standards: 4.NBT.5; 4.NBT.3; 4.OA.3	
Grade Level: Fourth Grade		Topic 6: Developing Fluency: Multiplying by 1-Digit Numbers		
Instructional Emphasis: Number and Operations in Base Ten			Essential Questions: <ul style="list-style-type: none">• How can you use models to help you record multiplication? (6-1)• How can you record multiplication of a 2-digit number by a 1-digit number? (6-2)• How can you multiply a 2-digit number by a 1-digit number and check the product for reasonableness? (6-3)• How do you multiply a 3-digit or 4-digit number by a 1-digit number? (6-4)• How can you estimate to check if an answer to a multiplication problem is reasonable? (6-5)• How can you tell what information is missing to solve a problem? (6-6)	
Big Ideas: <ul style="list-style-type: none">• 6-1: There is an expanded algorithm for multiplying where numbers are broken apart using place value and the parts are used to find partial products. The partial products are then added together to find the product.• 6-2: The standard multiplication algorithm is just a shortened way of recording the information in the expanded multiplication algorithm.• 6-3: The standard multiplication algorithm is a shortcut for the expanded algorithm. Regrouping is used rather than showing off partial products. Different numerical expressions can have the same value. Or, the value of one expression can be less than (or greater than) the value of the other expression.• 6-4: The standard algorithm for multiplying three-digit by one-digit numbers is just an extension to the hundreds place of the algorithm for multiplying two-digit by one-digit numbers.• 6-5: The standard algorithm for multiplication involves breaking apart numbers using place value, finding partial products, and then adding partial products to get the final product. The process is the same regardless of the size of the factors.• 6-6: Information in a problem can often be shown using a pictures or diagram and used to understand and solve the problem. Some problems can be solved by writing and completing a number sentence or equation.				
Lesson 1: Arrays and Using an Expanded Algorithm	Lesson 2: Connecting the Expanded and Standard Algorithms	Lesson 3: Multiplying 2-Digit by 1-Digit Numbers	Lesson 4: Multiplying 3- and 4-Digit by 1-Digit Numbers	Lesson 5: Multiplying by 1-Digit Numbers
Vocabulary: Objective: Students will record multiplication using an expanded algorithm. Materials: Place-Value Blocks (Teaching Tool 8) Content Reviewed: Division; Subtraction; Estimating Sums; Problem Solving; Multiplication Standard: 4.NBT.5	Vocabulary: Objective: Students will multiply 2-digit numbers by 1-digit numbers using paper-and-pencil methods. Materials: Place-Value Blocks (or Teaching tool 8) (optional) Content Reviewed: Subtraction; Rounding; Comparing Whole Numbers; Multiplication/Division Fact Families; Addition; Number Patterns	Vocabulary: Objective: Students will multiply 2-digit numbers by 1-digit numbers using the standard algorithm and estimate to check for reasonableness. Materials: Content Reviewed: Place Value; Addition; Subtraction; Time; Multiplication; Estimating Sums Standard:	Vocabulary: compensation Objective: Students will use the standard algorithm to multiply 3- and 4-digit numbers by 1-digit numbers. Materials: Content Reviewed: Comparing Numbers; Estimating Products; Patterns; Multiplication Facts; Multiplication; Place Value	Vocabulary: Objective: Students will multiply 2-, 3-, and 4-digit numbers by 1-digit numbers using the standard algorithm and estimate to check for reasonableness. Materials: Content Reviewed: Place Value; Subtraction; Choose an Operation; Fact Families; Comparing Whole Numbers; Estimating Products; Multiplication

	Standard: 4.NBT.5; 4.OA.3	4.NBT.5; 4.OA.3	Standard: 4.NBT.5	Standard: 4.NBT.5; 4.NBT.3; 4.OA.3
Assessment	Assessment	Assessment	Assessment	Assessment
Topic 6 Introduction Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework	Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework
Lesson 6: Problem Solving: Missing or Extra Information				
Vocabulary: Objective: Students will identify what information in a problem is missing or is not needed. Materials: Content Reviewed: Addition; Mental Math; Subtraction; Place Value; Multiplication; Number Patterns Standard: 4.NBT.5				
Assessment				
Daily Common Core Review Problem-Based Interactive Learning Guided Practice Independent Practice Problem Solving				

Quick Check Master Center Activity Reteaching, Practice, and Enrichment Homework Topic 6 Assessment				
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