**5th Grade Math Unit Plan 2018-2019**

**Quarter 1**

Week 1

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| **EnVision Math Unit Lesson Plan** | **Common Core Standards:**5.OA.A.1, 5.OA.A.2 |
| **Grade** **Level:**Fifth Grade | **Topic 13:**Writing and interpret Numerical expressions | **Mathematical Practices:**MP. 1, MP.2, MP.3, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8 |
| **Instructional Emphasis:** Operations and Algebraic Thinking | **Essential Questions**:* How Can You Evaluate a Numerical Expression with More Than One Operations? (13-1)
* What Order Should You Use When You Evaluate an Expression? (13-2)
* How Can You Write a Numerical Expression to Record Calculations? (13-3)
 |
| **Big Ideas:*** Topic 13 focuses on deep understanding of using the Order of Operations to evaluate, write, and interpret numerical expression with grouping symbols.
* There is an agreed upon order in which operations are carried out in a numerical expression. (13-1)
* The value of a numerical expression can be found by using the order of operations. (13-2)
* Numerical expressions can represent the calculations needed to solve a problem. (13-3)
 |
| **Lesson 1:**Patterns with exponents and power of 10 | **Lesson 2:**Understand whole-number place value | **Lesson 3:**Decimals to thousandths |
| **Vocabulary:** Numerical expressions, Evaluate, Order of Operations, Parentheses**Objective:** Use the order of operations to evaluate expressions.**Materials:** None**Standard:** 5.OA.A.1**Mathematical Practices:** MP.2, MP.3, MP.4, MP.5 | **Vocabulary:** Brackets, Braces**Objective:** Evaluate expressions with parentheses, brackets, and braces. **Materials:** None**Standard:** 5.OA.A.1**Mathematical Practices:** MP.1, MP.3, MP.6, MP.7 | **Vocabulary:** None**Objective:** Write simple expressions that show calculations with numbers.**Materials:** None**Standard:** 5.OA.A.2**Mathematical Practices:** MP.2, MP.3, MP.4, MP.8 |
| **Assessment** | **Assessment** | **Assessment** |
| Topic 13 IntroductionMARS task (Fantastic Frames)Math TalkPOM (Game Show)Daily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math TalkPOM (Game Show)Daily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math TalkPOM (Game Show)Daily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework |
| **En-Vision Math Unit Lesson Plan** | **Common Core Standards:**5.OA.A.1, 5.OA.A.2 |
| **Grade** **Level:** Fifth Grade | **Topic 13:**Writing and interpret Numerical expressions | **Mathematical Practices:**MP. 1, MP.2, MP.3, MP.3, MP.4, MP.6, MP.7,  |
| **Big Ideas:*** Topic 13 focuses on deep understanding of using the Order of Operations to evaluate, write, and interpret numerical expression with grouping symbols.
* Numerical expressions show relationships among the quantities involved which you can interpret without evaluating the expressions. (13-4)
* Good math thinkers know how to think about words and numbers to solve problems. (13-5)
 | **Essential Questions**:* How can you Interpret Numerical Expressions without Evaluating Then? (13-4)
* How can you use reasoning to solve problems? (13-5)
 |
| **Lesson 4:**Interpret numerical expressions. | **Lesson 5:*** Math practice and problem solving; Reasoning
 |
| **Vocabulary:** None**Objective:** Interpret numerical expressions without evaluating them.**Materials:** None**Standard:** 5.OA.A.2**Mathematical Practices:** MP.2, MP.3, MP.7 | **Vocabulary:** None**Objective:** Use reasoning to solve problems by making sense of quantities and relationships in the situation. **Materials:** None**Standard:** 5.OA.A.1, 5.OA.A.2**Mathematical Practice:** MP.1, MP.2, MP.3, MP.4, MP.6 |
| **Assessment** | **Assessment** |
| Math TalkProblem of the Month (Game Show)Daily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math TalkProblem of the Month (Game Show)Daily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,HomeworkTopic 1 AssessmentTopic 1 Performance Assessment |

WEEK 2

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.OA.B.3 |
| **Grade** **Level:** Fifth Grade | **Topic 15:** Algebra: Analyze Patterns and Relationships | **Mathematical Practice:** MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8 |
| **Instructional Emphasis:** Operations and Algebraic Thinking | **Topic Essential Questions**:* How can number patterns be analyzed and graphed?
* How can Number patterns

And graphs be used to solve problems? |
| **Big Ideas:*** Two patterns can be extended using the same rule and there will be a relationship between the patterns. (15-1)
* Two patterns can be extended using rules and there will be a relationship between the patterns. (15-2)
* A graph can show the relationship between two number sequences. (15-3)
* Good Math thinkers make sense of problems and think of ways to solve them. If they get stuck, they don’t give up.
 |
| **Lesson 1:**Numerical Patterns | **Lesson 2:**More Numerical Patterns | **Lesson 3:**Analyze and Graph Relationships | **Lesson 4:**Math Practices and Problem Solving: Make Sense and Persevere |
| **Vocabulary:** Corresponding terms, number sequence**Objective:** Analyze numerical patterns.**Materials:** None**Standard:** 5.OA.B.3 | **Vocabulary:** None**Objective:** Two patterns can be extended using rules and there will be a relationship between the patterns.**Materials:** None**Standard:** 5.OA.B.3**Mathematical Practice:** MP.2, MP.3, MP.4, MP.7, MP.8 | **Vocabulary:** None**Objective:** Analyze patters and graph ordered pairs generated from number sequences.**Materials:** Centimeter grid paper (or TT 9), Coordinate grids (TT 20), Pencils, Straightedge **Standard:** 5.OA.B.3**Mathematical Practice:** MP.1, MP.3, MP.4, MP.7 | **Vocabulary:** None**Objective:** Make sense of problems and persevere in solving them.**Materials:** Centimeter grid paper (or TT 9), Coordinate grids (TT 20), Pencils, Straightedge**Standard:** 5.OA.B.3**Mathematical Practice:** MP.1, MP.2, MP.5, MP.6 |
| **Assessment** | **Assessment** | **Assessment** | **Assessment** |
| Topic 15 IntroductionMath talkMARS Task (Fantastic Frames)Problem of the month (Friends You Can Count on)Daily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math talkProblem of the month (Friends You Can Count on)Daily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math talkProblem of the month (Friends You Can Count on)Daily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,Homework | Math talkProblem of the month (Friends You Can Count on)Daily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check Master (Pearson Realize)Center Activity (Moby Max, Skills cards, Folder Games, Performance Tasks)Re-teaching,HomeworkTopic 15 AssessmentTopic 15 Performance Assessment |

WEEK 3

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|  **Vision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.A.1; 5.NBT.A.2; 5.NBT.3.a; 5.NBT.3.b; 5.NBT.A.4 |
| **Grade** **Level:** Fifth Grade | **Topic 1:** Understand Place Value |
| **Instructional Emphasis:** Numbers and Operations in Base Ten | **Essential Questions**: * How can you explain patterns in the number of zeros in a product? (1-1)
* How are place-value positions related? (1-2)
* How can you read and write decimals to the thousandths? (1-3)
 |
| **Big Ideas:*** Basic facts and place-value patterns can be used to find products when one factor is a multiple of 10, 100, or 1,000; an exponent with 10 as the base can be used to represent powers of 10. (1-1)
* Understanding each digit’s place value in a number provides a way to understand the number’s value (1-2)
* Our number system is based on powers of 10. Whenever we get 10 in one place value, we move to the next greater place value. (1-3)
 |
| **Lesson 1:**Patterns with exponents and power of 10 | **Lesson 2:**Understand whole-number place value | **Lesson 3:**Decimals to thousandths |
| **Vocabulary:** Exponent, power, base**Objective:** Use exponents to write powers of 10 and calculate products.**Materials:** Place-Value blocks (or TT 4 and TT 5) index cards.**Standard:** 5.NBT.A.2 | **Vocabulary:** Value, expanded form**Objective:** Read and write whole numbers using standard form, expanded form, and number names. **Materials:** Place-value chart (TT 3), colored pencils**Standard:** 5.NBT.A.1 | **Vocabulary:** Thousandths**Objective:** Students represent decimals (thousandths) as fractions and fractions with denominators of 1,000 as decimals.**Materials:** Place-Value blocks (or TT 4 and TT 5),Decimal place-value chart (TT 6), Index cards**Standard:** 5.NBT.A.1; 5.NBT.3.a |
| **Assessment** | **Assessment** | **Assessment** |
| Topic 1 IntroductionMARS task, Math TalkPOMDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, Homework | Math TalkPOMDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, Homework | Math TalkPOMDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, Homework |

Week 4

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| **En-Vision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.A.1; 5.NBT.A.2; 5.NBT.3.a; 5.NBT.3.b; 5.NBT.A.4 |
| **Grade** **Level:** Fifth Grade | **Topic 1:** Place Value |
| **Big Ideas:*** Each digit within a decimal number has place value that helps determine the value of the number. (1-4)
* Place value can be used to compare and order whole numbers and decimals. (1-5)
* Rounding is a process for finding the multiple of 10, 100, and so on, or of 0.1, 0.01, and so on, closest to a given number. (1-6)
 | **Essential Questions**: * How can you represent decimals? (1-4)
* How can you compare decimals? (1-5)
* How can you round decimals? (1-6)
 |
| **Lesson 4:**Understand Decimal Place Value | **Lesson 5:**Compare Decimals | **Lesson 6:** Problem Solving: Look for a Pattern |
| **Vocabulary:** equivalent decimals**Objective:** Read and write decimals through thousandths in different ways.**Materials:** Decimal Place-Value Chart (TT 6), Decimal grids (TT 8) Markers**Standard:** 5.NBT.3.a | **Vocabulary:** None**Objective:** Students Use place value to compare decimals through thousandths.**Materials:** Decimal place-value chart (TT 6), Number line (TT 12), index cards, markers**Standard:** 5.NBT.3b | **Vocabulary:** None**Objective:** Round decimals to different places.**Materials:** Problem Solving: Look for a Pattern (Teaching Tool 8)**Standard:** 5.NBT.A.4 |
| **Assessment** | **Assessment** | **Assessment** |
| Math Talk MARS TaskProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, Homework | Math Talk MARS TaskProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, Homework | Math Talk MARS TaskProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL, Pearson Realize)Re-teaching, HomeworkTopic 1 AssessmentTopic 1 Performance Assessment |

Week 5

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.A.4; 5.NBT.B.7 |
| **Grade** **Level:** Fifth Grade | **Topic 2:** Adding and Subtracting Decimals to Hundredths |
| **Instructional Emphasis:** Number and Operations in Base Ten | **Essential Questions**: * How can you use mental math to add? (2-1)
* How can you estimate sums? (2-2)
* How can you use a grid to add decimals? (2-3)
* How can you add decimals? (2-4)
 |
| **Big Ideas:*** 2-1: There is more than one way to do a mental calculation. Techniques for doing addition or subtraction calculations mentally involve changing the numbers so the calculation is easy to do mentally.
* 2-2: A sum or difference can be estimated by replacing numbers with other numbers that are easier to add and subtract mentally.
* 2-3: Models and algorithms for adding or subtracting multi-digit decimals are just an extension of models and algorithms for adding or subtracting multi-digit whole numbers.
* 2-4: Adding multi-digit is similar to adding multi-digit whole numbers.
 |
| **Lesson 1:**Mental Math | **Lesson 2:**Rounding Whole Numbers and Decimals | **Lesson 3:**Estimating Sums and Differences | **Lesson 4:**Add Decimals |
| **Vocabulary:** Commutative Property of addition; Associative Property of addition; compatible numbers; compensation**Objective:** Use properties of addition and strategies to solve problems mentally.**Materials:** Decimal Place-Value Chart (TT 6) markers, paper tape **Standard:** 5.NBT.B.7 | **Vocabulary:** None**Objective:**Use rounding or compatible numbers to estimate sums and differences.**Materials:** Red markers, paper, pencils**Standard:**5.NBT.B.7 | **Vocabulary:** None **Objective:** Model sums and differences of decimals.**Materials:** Decimal grid (TT 8), Decimal place-value chart (TT 6), Place Value blocks (TT 4), centimeter Grid paper (TT 9), Scissors**Standard:**5.NBT.B.7 | **Vocabulary:** None**Objective:** Add decimals to hundredths using the standard Algorithm. **Materials:** Decimal grid (TT 8) Colored Pencils, Crayons, or Markers**Standard:**5.NBT.7 |
| **Assessment** | **Assessment** | **Assessment** | **Assessment** |
| Topic 2 IntroductionMath talkMARS TaskProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework | Math talkProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework | Math talkProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework | Math talkProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework |

Week 6

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.B.7 |
| **Grade** **Level:** Fifth Grade | **Topic 2:** Adding and Subtracting Decimals |
| **Instructional Emphasis:** Number and Operations in Base Ten | **Essential Questions**: * How can you subtract Decimals? (2-5)
* How can you add and subtract decimals? (2-6)
* How can you represent a problem with bar diagrams?

(2-7) |
| **Big Ideas:*** 2-5: Subtracting multi-digit decimals in similar to subtracting multi-digit whole numbers.
* 2-6: Adding or subtracting multi-digit decimals is similar to adding or subtracting multi-digit whole numbers.
* 2-7: Good math thinkers choose and apply math they know to show and solve problems from everyday life.
 |
| **Lesson 5:**Subtract Decimals | **Lesson 6:** Add and subtract Decimals | **Lesson 7:**  Math Practice and Problem solving: Model with Math |
| **Vocabulary:** None**Objective:** Subtract decimals to the hundredths using the standard algorithm.**Materials:** None**Standard:** 5.NBT.B.7 | **Vocabulary:** None**Objective:** Add and subtract decimals.**Materials:** Decimal grid (TT8), index cards, markers**Standard:** 5.NBT.B.7 | **Vocabulary:** None**Objective:** Students compute differences of decimals involving tenths, hundredths, and thousandths.**Materials:** None**Standard:** 5.NBT.B.7 |
| **Assessment** | **Assessment** | **Assessment** |
| Math talkProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe teachingHomework | Math talkProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe teaching Homework | Math talkMARS TaskProblem of the monthDaily Common Core ReviewProblem-Based Interactive LearningGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe teachingHomeworkTopic 2 Assessment |

Week 7

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.A.2; 5.NBT.B.5;  |
| **Grade** **Level:** Fifth Grade | **Topic 3:** Fluently multiply multi-digit whole numbers |
| **Instructional Emphasis:** Numbers and Operations in Base Ten | **Essential Questions**: * How Can You Use Patterns and Mental Math to Multiply a Whole number by a Power of 10?(3-1)
* How Can You Estimate Products? (3-2)
* How Do You Multiply 3-Digit Numbers by 2-Digit Numbers? (3-3)
* How Can You Multiply with Zeros?(3-4)
 |
| **Big Ideas:*** Place-value patterns and mental math can be used to write the product of a whole numbers and powers of 10 (3-1)
* Estimating products is a useful technique to quickly solve mathematical problems and understand the value of numbers used in real-world situations. There is more than one way to estimate a product. (3-2)
* Multiplying a three-digit number by a two-digit number can be accomplished by combining equal groups. Rounding to the nearest 10 or using compatible numbers will help you estimate with greater accuracy when multiplying with greater numbers. (3-3)
* The process for multiplying factors with zeroes is always the same regardless of the size of the numbers with zeros. Estimation is a strategy that can be used to check the final product for reasonableness. (3-4)
 |
| **Lesson 1:**Multiply Greater Numbers by Powers of 10 | **Lesson 2:**Estimate Products | **Lesson 3:**Multiply 3-Digit by 2- Digit numbers | **Lesson 4:**Multiply whole numbers with zeros |
| **Vocabulary:** None**Objective:** Use place-value understanding and patterns to mentally multiply whole numbers and powers of 10.**Materials:** Place value blocks (or TT 4 and 5), paper, red pencil**Standard:** 5.NBT.A.2 | **Vocabulary:** Underestimate, overestimate**Objective:** Use rounding and compatible numbers to estimate products.**Materials:** Place value blocks (or TT 4 and 5), index cards, markers**Standard:** 5.NBT.2 | **Vocabulary:** Partial Product**Objective:** Multiply 3-digit by 2-digit numbers by combining equal groups and adding partial products.**Materials:** Place-value chart (or TT 3), markers**Standard:** 5.NBT.B.5 | **Vocabulary:** None**Objective:** Use knowledge about place value and multiplying with 2 digit and 3 digit numbers to multiply with zeros.**Materials:** Paper, pencilsExponents (Teaching Tool 14)**Standard:** 5.NBT.B.5 |
| **Assessment** | **Assessment** | **Assessment** | **Assessment** |
| Topic 3 IntroductionMath talkMARS TaskProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity: Math and Science ActivityRe-teaching, Homework | Math talkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (Ixl, Pearson Realize)Problem solving Reading MatRe-teaching, Homework | Math talkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (Ixl, Pearson Realize)Re-teach Homework | Math talkMARS TaskProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (Ixl, Pearson Realize)Re teachingHomework |

Week 8

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.A.2, 5.NBT.B.7,  |
| **Grade** **Level:** Fifth Grade | **Topic 3:** Fluently multiply multi-digit whole numbers |
| **Instructional Emphasis:** Number and Operations in Base Ten | **Essential Questions**: * How can you use multiplication to solve problems?(3-5)
* How can you use a Bar Diagram to Solve a Multiplication Problem?

(3-6)* How can you critique reasoning of others? (3-7)
 |
| **Big Ideas:*** 3-5: No matter the size of the numbers, the standard algorithm for multiplying whole numbers is always based on properties of operations and can be used to solve problems.
* 3-6: Use a bar diagram writing an equation are two strategies that can be used to solve multi-step problems.
* 3-7: Good math thinkers use math to explain why they are right. They can talk about the math that others do, too.
 |
| **Lesson 5:** Multiplying by 1-Digit Numbers | **Lesson 6:**  Multiplying by 2-Digit by 2-Digit Numbers | **Lesson 7:** Math Practices and Problem Solving: Critique Reasoning |
| **Vocabulary:** None**Objective:** Use properties and the standard algorithm for multiplication to find the products of multi-digit numbers. **Materials:** None**Standard:** 5.NBT.B.5 | **Vocabulary:** Variable**Objective:** Use models and strategies to solve word problems.**Materials:** None**Standard:** 5.NBT.B.5 | **Vocabulary:** None**Objective:** Critique the reasoning of others by asking questions, looking for flaws, and using prior knowledge of estimation**Materials:** None**Standard:** 5.NBT.B.5;  |
| **Assessment** | **Assessment** | **Assessment** |
| Math TalkProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter GameRe-teachingHomework | Math TalkProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem Check MasterCenter gameRe-teaching Homework | Math TalkMARS TaskProblem of the MonthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity: Math and ScienceRe-teaching HomeworkTopic 3 Assessment |

Week 9

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.6; 5.OA.2 |
| **Grade** **Level:** Fifth Grade | **Topic 4:** Use Models and Strategies to Multiply Decimals |
| **Instructional Emphasis:** Number and Operations in Base Ten | **Essential Questions**: * What patterns can help you multiply decimals by powers of 10? (4-1)
* What Are Some Ways to Estimate Products with Decimals? (4-2)
* How can you model multiplying a Decimal by a Whole number? (4-3)
* How do you multiply a Decimal by a whole number? (4-4)
 |
| **Big Ideas:*** 4-1: Patterns can be identified and used to multiply decimals by 10, 100, and 1,000. Representations such as symbols, diagrams, and words can help you multiply and communicate mathematical ideas.
* 4-2: You can estimate the product of a decimal and a whole number by using compatible numbers and rounding. Comparing two strategies can help you decide which strategy provides an estimate that is closer to the exact answer.
* 4-3: The standard multiplication algorithm used with decimals in an extension of the standard algorithm used when multiplying whole numbers. You can use models to represent multiplication problems and communicate ideas to others.
* 4-4: The steps involved in multiplying a decimal by a whole numbers are similar to the steps used in multiplying two whole numbers. Place value in the factors determines the placement of the decimal point in the product.
 |
| **Lesson 1:**Multiply Decimals by Powers of 10 | **Lesson 2:**Estimate the Product of a decimals and a whole number | **Lesson 3:**Use models to multiply a decimal and a whole number | **Lesson 4:**Multiply a decimal by a whole number |
| **Vocabulary:**None**Objective:**Use knowledge about place value and patterns to find the product of a decimal number and a power of 10**Materials:**Index cards, markers**Standard:**5.NBT.A.2 | **Vocabulary:**None**Objective:**Use rounding and compatible numbers to estimate the product of a decimal and a whole number.**Materials:**None**Standard:**5.NBT.B.7 | **Vocabulary:**None**Objective:**Use models to represent multiplying a decimal and a whole number.**Materials:**Decimal grids (TT 8)**Standard:**5.NBT.B.7 | **Vocabulary:**None**Objective:**Use place-value understanding and the standard multiplication algorithm to multiply a decimal by a whole number. **Materials:**None**Standard:**5.NBT.B.7 |
| **Assessment** | **Assessment** | **Assessment** | **Assessment** |
| Topic 4 IntroductionMath TalkMARS TaskProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingReview What you KnowQuick Check MasterCenter Activity (IXL. Pearson Realize)Re-teachingHomework | Math TalkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL. Pearson Realize)Re-teaching Homework | Math TalkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL. Pearson Realize)Re-teaching Homework | Math TalkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter Activity (IXL. Pearson Realize)Re-teachingHomework |

Week 10

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| **Envision Math Unit Lesson Plan** | **Common Core Standards:** 5.NBT.B.7;  |
| **Grade** **Level:** Fifth Grade | **Topic 4:** Use Models and Strategies to Multiply Decimals |
| **Instructional Emphasis:** Number and Operations in Base Ten | **Essential Questions**: * How can you model decimal multiplication? (4-5)
* How can you multiply decimals using partial products? (4-6)
* How can you use properties to multiply decimals? (4-7)
 |
| **Big Ideas:*** 4-5: Steps for multiplying decimals are similar to steps for multiplying whole numbers. Place value determines the placement of the decimal point in a product.
* 4-6: The partial product process for multiplying whole numbers can be used for multiplying with decimals. You can use models and other strategies to find the answer and determine if it is reasonable.
* 4-7: The Associative and Communitive Properties can be used to break apart and multiply two decimals.
 |
| **Lesson 5:**Use Models to Multiply a Decimal and a Decimal | **Lesson 6:**Multiply Decimals Using Partial Products | **Lesson 7:** Zeros in the Quotient |
| **Vocabulary:** None**Objective:** Use grids to model decimals and find the product of a decimal and a decimal.**Materials:** Decimal grids (TT 8)**Standard:** 5.NBT.B.7 | **Vocabulary:** None**Objective:** Multiply decimals using partial products ad models.**Materials:** Decimal Grids (TT 8)**Standard:** 5.NBT.B.7 | **Vocabulary:** None**Objective:** Use properties to multiply decimals.**Materials:** Decimal grid (TT 8), Index cards**Standard:** 5.NBT.B.7 |
| **Assessment** | **Assessment** | **Assessment** |
| Math TalkProblem of the monthDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teachingHomework | Problem of the MonthMath TalkDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework | Problem of the MonthMath TalkDaily Common Core ReviewGuided PracticeIndependent PracticeProblem SolvingQuick Check MasterCenter ActivityRe-teaching, Homework |