Saint Theresa of Avila School- West Roxbury, MA

## Curriculum Maps

| Subject: | Grade: |
| :--- | :--- |
| Math | Four |


| Time <br> Frame | Essential <br> Question(s) | Topic | Content | Resources | Assessments | Standards |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| September | How can patterns be use to find some multiplication facts? <br> How can unknown multiplication be found by breaking them into known facts? <br> How can unknown division facts be found by thinking about a related multiplication fact? | Introduction to Grade Four Mathematics <br> Multiplication and Division: Meanings and Facts | - Meanings of Multiplication <br> - Patterns for Facts <br> - Multiplication Properties <br> - 3, 4, 6, 7, and 8 as Factors <br> - Problem Solving: Look for a Pattern <br> - Meanings of Division <br> - Relating Multiplication and Division <br> - Special Quotients <br> - Using Multiplication Facts to Find Division Facts <br> - Problem Solving: Draw a Picture and Write an Equation | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | $\begin{aligned} & \hline \text { 4.OA. } 1 \\ & \text { 4.OA. } 3 \\ & \text { 4.OA. } 4 \\ & \text { 4.OA. } 5 \end{aligned}$ |
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| October | How can patterns be used to describe how two quantities are related? <br> How can a relationship between two quantities be shown using a table? <br> How are greater numbers read and written? | Generate and Analyze Patterns <br> Place Value | - Repeating Patterns <br> - Number Sequences <br> - Extending Tables <br> - Writing Rules for Situations <br> - Geometric Patterns <br> - Problem Solving: Act It Out and Use Reasoning <br> - Representing Numbers <br> - Place Value Relationships <br> - Comparing Numbers <br> - Ordering Numbers <br> - Rounding Whole Numbers <br> - Problem Solving: Make an Organized List | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | $\begin{aligned} & \text { 4.OA. } 3 \\ & \text { 4.OA. } 5 \\ & \text { 4.NBT. } 1 \\ & \text { 4.NBT. } 2 \\ & \text { 4.NBT. } \end{aligned}$ |


|  | How can whole numbers be compared and ordered? |  |  |  |  |  |
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| November | How can sums and differences of whole numbers be estimated? <br> What are standard procedures for adding and subtracting whole numbers? | Addition and Subtraction of Whole Numbers | - Using Mental Math to add and Subtract <br> - Estimating Sums and Differences of Whole Numbers <br> - Adding Whole Numbers <br> - Subtracting Whole Numbers <br> - Subtracting Across Zeroes <br> - Problem Solving: Draw a <br> Picture and Write and Equation | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | 4.NBT. 3 4.NBT. 4 4.OA. 3 |
| December | How can some products be found mentally? <br> How can products be estimated? | Number Sense: Multiplying by 1-Digit Numbers | - Arrays and Multiplying by 10 and 100 <br> - Multiplying by Multiples of 10 and 100 <br> - Breaking apart to Multiply <br> - Using Mental Math to Multiply <br> - Using Rounding to Estimate <br> - Problem Solving: Reasonableness | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | $\begin{aligned} & \hline \text { 4.NBT. } 3 \\ & \text { 4.NBT. } 5 \\ & \text { 4.OA. } 3 \end{aligned}$ |
| January | How can arrays be used to find products? | Developing Fluency: <br> Multiplying by 1-Digit Numbers | - Arrays and Using an Expanded Algorithm <br> - Connecting the Expanded and Standard Algorithms <br> - Multiplying 2-Digit and 1- | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher | Topic Test Individual Conferences | $\begin{aligned} & \text { 4.NBT. } 5 \\ & \text { 4.NBT. } 3 \\ & \text { 4.OA. } 3 \end{aligned}$ |


|  | What is a standard procedure for multiplying 1-Digit numbers? |  | Digit Numbers <br> - Multiplying 3- and 4-Digit by 1-Digit numbers <br> - Multiplying by 1-Digit Numbers <br> - Problem Solving: Missing or Extra Information | textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| February | How can greater products be found mentally? <br> How can greater products be estimated? | Number Sense: Multiplying by 2-Digit Numbers | - Arrays and Multiplying by 2Digit Number by Multiples of 10 <br> - Using Mental Math to Multiply 2-Digit Numbers <br> - Using Rounding to Estimate <br> - Using Compatible Numbers to Estimate <br> - Problem Solving: MultipleStep Problems | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | $\begin{aligned} & \text { 4.NBT3 } \\ & \text { 4.NBT. } 5 \\ & \text { 4.OA. } 3 \end{aligned}$ |
| March | How can arrays be used to find greater products? <br> What is a standard procedure for multiplying multidigit numbers? <br> What are different meanings of division? <br> How can mental | Developing Fluency: Multiplying by 2-Digit Numbers <br> Number Sense: Dividing by 1-Digit Divisors | - Arrays and Multiplying 2-Digit Numbers <br> - Arrays and an Expanded Algorithm <br> - Multiplying 2-Digit Numbers by Multiples of 10 <br> - Multiplying 2-Digit Numbers by 2-Digit Numbers <br> - Problem Solving: TwoQuestion Problems <br> - Estimating Quotients <br> - Estimating Quotients for Greater Dividends <br> - Dividing with Remainders <br> - Multiplication and Division | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | 4.NBT. 5 4.OA. 3 <br> 4.NBT. 6 <br> 4.NBT. 5 <br> 4.OA. 2 <br> 4.OA. 3 |


|  | math and estimation be used to divide? |  | Stories <br> - Problem Solving: Draw and Picture and Write an Equation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| April | How can repeated subtraction be used to model division? <br> What is the standard procedure for dividing multi-digit numbers? | Developing Fluency: Dividing by 1-Digit Divisors | - Using Objects to Divide: Division as Repeated Subtraction <br> - Division as Repeated Subtraction <br> - Using Objects to Divide: Division as Sharing <br> - Dividing 2-Digit by 1-Digit Numbers <br> - Dividing 3-Digit by 1-Digit Numbers <br> - Deciding Where to Start Dividing <br> - Dividing 4-Digit by 1-Digit Numbers <br> - Problem Solving: MultipleStep Problems | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | 4.NBT. 6 <br> 4.NBT. 1 <br> 4.NBT. 5 <br> 4.OA. 3 |
| May | How can the same fractional amount be named using symbols in different ways? <br> How can fractions be compared and ordered? <br> What does it mean to add and subtract fractions and mixed numbers with like denominators? <br> What is the standard procedure for adding and subtracting | Fraction Equivalence and Ordering <br> Adding and Subtracting Fractions and Mixed Numbers with Like Denominators | - Factors <br> - Prime and Composite Numbers <br> - Multiples <br> - Equivalent Fractions <br> - Number Lines and Equivalent Fractions <br> - Comparing Fractions <br> - Ordering Fractions <br> - Problem Solving: Writing to Explain <br> - Modeling Addition of Fractions <br> - Adding Fractions with Like Denominators <br> - Modeling Subtraction of Fractions <br> - Subtracting Fractions with Like Denominators <br> - Adding and Subtracting on the Number Line <br> - Improper Fractions and | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | 4.NF. 1 <br> 4.NF. 2 <br> 4.OA. 4 <br> 4.OA. 5 <br> 4.NF. 3 <br> 4.NF.3.a <br> 4.NF.3.b <br> 4.NF.3.c <br> 4.NF.3.d |


|  | fractions and mixed numbers with like denominators? <br> How can fractions and mixed numbers be added and subtracted on a number line? |  | Mixed Numbers <br> - Modeling Addition and Subtraction of Mixed Numbers <br> - Adding Mixed Numbers <br> - Subtracting Mixed Numbers <br> - Decomposing Fractions <br> - Problem Solving: Draw a Picture and Write an Equation |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June | How is decimal numeration related to whole number numeration? <br> How can decimals be compared and ordered? <br> How are fractions and decimals related? | Extending Fraction Concepts | - Fractions as Multiples of Unit Fractions: Using Models <br> - Multiplying a Fraction by a Whole Number: Using Models <br> - Multiplying a Fraction by a Whole Number: Using Symbols <br> - Fractions and Decimals <br> - Fractions and Decimals on the Number Line <br> - Equivalent Fractions and Decimals <br> - Decimal Place Value <br> - Comparing and Ordering Decimals <br> - Using Money to Understand Decimals Problem Solving: Draw a Picture | - Evision student workbook <br> - Envision student textbook <br> - Envision teacher textbook <br> - Envision teacher workbook <br> - Pearson Envision online program <br> - IXL online <br> - Supplemental math materials <br> - Manipulatives <br> - Math notebook | Topic Test Individual Conferences | 4.NF. 4 4.NF.4.a 4.NF.4.b 4.NF4.c 4.NF. 5 4.NF. 6 4.NF. 7 4.MD. 1 4.MD. 2 |

