

Roy G. Eversole Mathematics Curriculum Map 4th Grade

KY Standard	Learning Target	Resources/Assessment	Vocabulary	Time
<p>4.NBT.1- Recognize in a multi-digit whole number, a digit in the one place represents ten times what it represents in the place to its right, MP.7</p> <p>4.NBT.2 Represent and compare multi-digit whole numbers</p> <p style="padding-left: 20px;">a. Read and write multi-digit whole numbers using base-ten numerals, number names and expanded form.</p> <p style="padding-left: 20px;">b. Compare two multi-digit numbers based on meanings of the digit in each place, using $>$, $=$, and $<$ symbols to record results of comparisons. MP.2, MP.6</p> <p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place. MP.2, MP.6</p>	<p>*I can write numbers in standard form, expanded form, and number words through one million.</p> <p>*I can compare two multi-digit numbers.</p> <p>*I can recognize each digit is 10 times the digit in the place to its right.</p> <p>*I can round multi-digit numbers to any place value to 1,000,000.</p>	<p>Envision Math Topic 1-Generalize Place Value Understand 1-1 Numbers through one million 1-2 Place Value Relationships 1-3 Compare whole numbers 1-4 Round Whole Numbers 1-5 Problem Solving</p> <p>Pre-Test -(3.NBT.1) Practice Buddies 1-1 Through 1-5</p> <p>Exit Slips</p> <p>Place Value Mats</p> <p>*Chapter One Test</p> <p>Videos-Model 1 Lesson 1 and 2, Math Antics, Videos in Daily Lessons</p>	<ul style="list-style-type: none"> -Whole Number -Place Value -Ones -Tens -Hundreds -Thousands -Ten Thousands -Hundred Thousands -Millions -Base Ten -Numerals -Standard Form -Whole Number -Expanded Form -Number Name -Word Form -Compare -Symbol -Greater Than $>$ -Less Than $<$ -Round 	<p style="text-align: center;">1st Quarter (8 Days)</p>

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<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using an algorithm MP.2, MP.8</p> <p>4.OA.3 Solve Multi-Step word problems</p> <p>a. Perform operations in the conventional order when there are no parentheses to specify a particular order.</p> <p>b. Solve multistep word problems posed with whole number answers using the four operations, including problems in which remainders be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding. MP.1, MP.4</p>	<p>*I can add and subtract multi-digit numbers.</p> <p>*I can solve two-step word problems using addition and subtraction.</p> <p>* I can identify missing variable in addition and subtraction problems.</p> <p>How can sums and differences of whole numbers be estimated?</p>	<p>Envision Math</p> <p>Topic 2- Fluently Add and Subtract Multi-Digit Whole Numbers</p> <p>2-1- Finding Sums and Differences with Mental Math</p> <p>2-2 Estimate Sums and Differences</p> <p>2-3 Add Whole Numbers</p> <p>2-4 Add Greater Numbers</p> <p>2-5 Subtract Whole Numbers</p> <p>2-6 Subtract Greater Numbers</p> <p>2-7 Subtract Across Zeros</p> <p>2-8 Problem Solving</p> <p>Pre-Test (3.NBT.2, 3.OA.8)</p> <p>Practice Buddies 2-1 Through 2-8</p> <p>Exit Slips</p> <p>Chapter 2 Test</p> <p>Videos- Math Antics, Generation Genius</p>	<p>-Add</p> <p>-Subtract</p> <p>-Sum</p> <p>-Addend</p> <p>-Difference</p> <p>-Minuend</p> <p>-Subtrahend</p> <p>-Regroup</p> <p>-Algorithm</p>	<p>1st Quarter (10 Days)</p>

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<p>4.NBT.5- Multiply whole numbers up to four digit number by a one-digit number. Two- digit number by two-digit number. Multiply using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays and/ or area models. MP.3, MP.4, MP.8</p> <p>4.OA.3 Solve multi-step word problems</p> <p>a. Perform operations in the conventional order when there are no parentheses to specify a particular order.</p> <p>b. Solve multi step word problems posed with whole numbers and having whole number answers using the four operations including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding. MP.1. MP.4</p>	<p>* I can multiply one digit whole numbers by multiples of ten. * I can multiple a four digit number by a one digit number. * I can solve multiplication word problems that use symbols for the unknown numbers.</p> <p>How can you multiply by 10, 100, and 1,000?</p> <p>How can you estimate when you multiply?</p> <p>How can you use multiplication to solve problems?</p>	<p>Envision Math Topic 3 -Use Strategies and Properties to Multiply by 1-Digit Numbers 3-1-Multiply by Multiples of 10, 100, and 1,000 3-2 Estimate Products 3-3 Use Arrays and Partial Products to Multiply 3-4 Use Area Models and Partial Products to Multiply 3-5 More Area Model and Partial Products to Multiply 3-6 Mental Math 3-7 Choose a Strategy to Multiply 3-8 Problem Solve Pre-test Chapter 3 Test Topic 4- Use strategies and Properties to Multiply by 2-Digit Numbers 4-1 Multiply by Multiples of 10 4-2 Use Models to Multiply 2-digit Numbers by Multiples of 10 4-3 Estimate using compatible numbers 4-4 Arrays and Partial Products Chapter 4 Test</p>	<p>-Multiply -Whole Number -Product -Array -Area Model -Partial Product</p>	<p>1st Quarter (20 days)</p>

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<p>4.NBT.6 Divide up to four-digit dividends by one-digit divisors. Find whole number quotients and remainders using strategies based on place value, the properties of operations. The relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays/ or area models. MP.3, MP.7, MP.8</p> <p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparisons by using drawing and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. MP.1, MP.2, MP.3</p> <p>4.OA.3 Solve multi-step word problems</p> <ol style="list-style-type: none"> a. Perform operations in the conventional order when there are no parentheses to specify a particular order. b. Solve multi step word problems posed with whole numbers and having whole number answers using the four operations including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computations and estimation strategies including rounding. MP.1, MP.4 	<p>*I can use different strategies to divide a number up to four digits by a one-digit divisor.</p> <p>* I can make sense of quantities and use mental math and place-value strategies to divide.</p> <p>* I can estimate quotients for 4 digit dividends.</p> <p>* I can divide by thinking about multiplication, estimation, properties, and place value.</p> <p>*I can solve multi step problems involving addition, subtraction, multiplication and division using the correct order of operations.</p>	<p>Envision Math</p> <p>Topic 5-Use Strategies and Properties to Divide by 1 Digit Numbers</p> <p>5-1 Mental Math-Find Quotients</p> <p>5-2 Estimate Quotients</p> <p>5-4 Interpret Remainders</p> <p>5-5-Use Partial Quotients to Divide</p> <p>5-6 Partial Quotients Greater numbers</p> <p>Chapter 5 Test</p> <p>Topic 6-Use Operations with Whole Numbers to Solve Problems</p> <p>6-1-Solve Comparison Problems</p> <p>6-2-Continue to Solve Comparison Problems</p> <p>6-3-Model Multi-Step Problems</p> <p>6-5 Solve Multi-Step Problems</p> <p>6-6 Problem Solving</p> <p>Chapter 6 Test</p>	<p>-Remainder</p> <p>-Divide</p> <p>-Quotient</p> <p>-Divisor</p> <p>-Dividend</p> <p>-Partial Quotient</p>	<p>2nd Quarter (21 days)</p>

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<p>KY.O.A.4 Find factors and multiples of numbers in the range 1-100.</p> <p>a. Find all factor pairs for a given whole number.</p> <p>b. Recognize that a whole number is a multiple of each of its factors.</p> <p>c. Determine whether a given whole number is a multiple of a given one digit number.</p> <p>d. Determine whether a given whole number is prime or composite. MP.5, MP.7</p>	<p>*I can find factor pairs for a whole number to 100.</p> <p>*I can find multiples to 100 of a one digit number.</p> <p>*I can identify prime and composite number to 100.</p> <p>How can you use arrays to find the factors of a number?</p> <p>How can you identify prime and composite numbers ?</p>	<p>Envision Math Topic 7-Factors and Multiples 7-1 Understand Factors 7-2 Factors 7-3- Repeated Reasoning 7-4- Prime and Composite Numbers 7-5 Multiples</p> <p>Chapter 7 Test</p>	<p>-Factor -Multiple -Prime -Composite -Factor Pair -Range -Digit</p>	<p>2nd Quarter (8 days)</p>

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<p>KY.4.NF.1 Understand and generate equivalent fractions.</p> <p>a. Use visual fraction models to recognize and generate equivalent fractions that have different numerator/denominator even though they are the same size.</p> <p>b. Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{na}{nb}$ ($\frac{n \times a}{n \times b}$) MP.4, MP.7, MP.8</p> <p>KY.4.NF.2-Compare two fractions with different numerators and different denominators using the symbols $<$, $>$, or $=$. Recognize comparisons are valid only when the two fractions refer to the same whole. Justify the conclusions. MP.2, MP.3</p>	<p>* I can Identify equivalent fractions</p> <p>* I can write a fraction equivalent to a given fraction</p> <p>*I can use division to find equivalent fractions.</p> <p>*I can use benchmarks, area models, and number lines to compare fractions.</p> <p>*I can use equivalent fractions to compare fractions.</p> <p>* I can use strategies to determine if one fraction is greater than, less than, or equal to another.</p>	<p>Envision Math Topic 8- Extend Understanding of Fraction Equivalence and Ordering</p> <p>8-1 Equivalent Fractions-Area Models 8-2 Equivalent Fractions-Number Lines 8-3 Generate Equivalent Fractions-(Multiplication) 8-4- Generate Equivalent Fractions (Division) 8-5 -Use Benchmarks to Compare Fractions 8-6 Compare Fractions 8-7 -Problem Solving</p> <p>Chapter 8 Test</p>	<p>-Fraction -Equivalent -Numerator -Denominator -Visual Models -Generate -Benchmark Fractions -Compare -Common Denominator</p>	<p>2nd Quarter (9 days)</p>

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<p>KY.4.NF.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.</p> <p>1 bb.</p> <p>a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>b. Decomposing a fraction into a sum of fractions with the same denominator in more than one way. Recording each decomposition by an equation. Justify decompositions.</p> <p>c. Add and subtract mixed numbers with like denominators.</p> <p>d. Solve word problems involving addition and subtraction of fractions referring to the same whole having like denominators. MP.1, MP.5, MP.7</p>	<p>*I can add two fractions of the same whole together.</p> <p>*I can subtract two fractions of the same whole from one another.</p> <p>(4th grade expectations are limited to fractions with denominators: 2, 3, 4, 5, 6, 8, 10, 12, and 100)</p> <p>*I can decompose a given Fractions into a sum of unit fractions.</p> <p>*I can decompose a given fraction into a sum of fractions in multiple ways.</p> <p>* I can create an equation adding fractions having the same denominator to compose a given fraction.</p> <p>*I can add mixed numbers with like denominator</p> <p>*I can subtract mixed numbers with like denominators</p> <p>*I can solve word problems that involve the addition and subtraction of fractions of the same whole.</p>	<p>Envision Math</p> <p>Topic 9-Understand Addition and Subtraction of Fractions</p> <p>9-1 Model Addition of Fractions</p> <p>9-2-Decompose Fractions</p> <p>9-3-Add Fractions with like Denominators</p> <p>9-4-Model Subtraction of Fractions</p> <p>9-5-Subtract Fraction with Like Denominators</p> <p>9-6-Add and Subtract Fractions with Like Denominators</p> <p>9-7-Model Addition and Subtraction of Mixed Numbers</p> <p>9-8 Add Mixed Numbers</p> <p>9-9-Subtract Mixed Numbers</p> <p>Chapter 9 Test</p>	<p>-Fraction</p> <p>-Joining</p> <p>-Seperating</p> <p>-Unit Fractions</p> <p>-Whole</p> <p>-Decompose</p> <p>-Equation</p> <p>-Mixed Number</p> <p>-Improper Fraction</p> <p>-Convert</p>	<p>3rd Quarter (13 days)</p>

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<p>KY.4.NF.4- Apply and extend previous understanding of multiplication to multiply a fraction by a whole number.</p> <p>a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$.</p> <p>b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$ and use this understanding to multiply a fraction by a whole number.</p> <p>c. Solve word problems involving multiplication of a fraction by a whole number. MP.5, MP.8.</p>	<p>*I can use fraction strips or number lines to understand a fraction as a multiple of a unit fraction.</p> <p>*I can use drawings, area models, or number lines to multiply fractions by whole numbers.</p> <p>*I can use properties and equations to multiply a fraction by whole number</p> <p>* I can explain how a given fraction is the product of a unit fraction multiplied by a whole number.</p> <p>*I can explain how a given fraction is a multiple of a unit fraction as a whole number</p> <p>*I can solve word problems involving multiplication of a fraction by a whole number.</p> <p>* I can add two fractions with denominators of 10 and 100.</p>	<p>Envision Math Topic 10- Extend Multiplication Concepts to Fractions 10-1- Fractions as Multiples of unit Fractions 10-2 Multiply a Fraction by a whole Number:Use Models 10-3 Multiply a Fraction by a Whole Number: Use Symbols 10-4 Solve Time Problems 10-5- Problem Solving</p> <p>Chapter 10 Test</p>	<p>-Fraction -Joining -Seperating -Unit Fractions -Whole -Decompose -Equation -Mixed Number -Improper Fraction -Convert</p>	<p>3rd Quarter (7 days)</p>

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<p>KY.4.MD.4- Use dot plots to analyze data to a statistical question</p> <ul style="list-style-type: none"> a. Identify a statistical question focused on numerical data b. Make a dot plot to display a data set of measurement in fractions of a unit (12, 14, 18) c. Solve problems involving addition and subtraction of fractions by using information presented in dot plots. MP.1, MP.6 	<p>*I can use line plots to solve problems involving fractions. *I can use what I know about line plots to critique the reasoning of others. *I can analyze and interpret a dot plot to answer statistical questions</p>	<p>Envision Math Topic 11-Represent and Interpret Data on Line Plots 11-1 -Read Line Plots 11-2 -Make Line Plots 11-3 Use Line Plots to Solve Problems 11-4- Problem Solving</p> <p>Practice Buddy 11-1 through 11-4 Chapter 11 Test</p>	<p>-Statistical -Dot Plot -Line Plot -Fraction -Data -Interpret</p>	<p>3rd Quarter (7 days)</p>

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<p>KY.4.NF.6 -Use decimal notation for fractions with denominators of 10 and 100. MP.4, MP.7</p> <p>KY.4.NF.7- Compare two decimals to hundredths.</p> <p>a. Compare two decimals to hundredths by reasoning about their size.</p> <p>b. Recognize that comparisons are valid only when the two decimals refer to the same whole.</p> <p>c. Records the results of comparisons with the symbols $>$, $=$, $<$ and justify the conclusions. MP.2, MP.3, MP.5</p> <p>KY.4.NF.5- Convert and add fractions with denominators of 10 and 100.</p> <p>a. Convert a fraction with a denominator of 10 to an equivalent fraction with a denominator of 100.</p> <p>b. Add two fractions with respective denominators 10 and 100. MP.5, MP.7</p>	<p>*I can relate fractions to decimals</p> <p>*I can locate and describe fractions and decimals on number lines.</p> <p>*I can compare decimals with reasoning about their size.</p> <p>*I can use equivalence to add fractions with denominators of 10 and 100</p> <p>*I can use fractions or decimals to solve word problems involving money.</p> <p>*I can use the structure of the place-value system to solve problems.</p>	<p>Envision Math</p> <p>Topic 12- Understand and Compare Decimals</p> <p>12-1 Fractions and Decimals</p> <p>12-2- Fractions and Decimals on the Number Line</p> <p>12-3 Compare Decimals</p> <p>12-4 Add Fractions with Denominators of 10 and 100</p> <p>12-5 Solve Word Problems Involving Money.</p> <p>12-6 Problem Solving</p> <p>Chapter 12 Test</p>	<p>-Decimal Notation</p> <p>-Denominator</p> <p>-Numerator</p> <p>-Tenths</p> <p>-Hundredth</p>	<p>3rd Quarter (8 days)</p>

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<p>KY.4.MD.1- Know relative size of measurement units (Mass, Weight, liquid volume, length, time) within one system of units. (Metric system, U.S standard system and time).</p> <ul style="list-style-type: none"> a. Understand the relationship of measurement units within any given measurement system. b. Within any given measurement system, express measurement in a larger unit in terms of a smaller unit. c. Record Measurement equivalents in two-column table. MP.5, MP.6 <p>KY.4.MD.2 -Use the four operations to solve word problem involving distances, intervals of time, liquid volumes, masses of object, and money.</p> <ul style="list-style-type: none"> a. Solve measurement problems involving whole number, simple fractions or decimals. b. Solve problems that require converting a given measurement from a larger unit to a smaller unit within a common measurement system, such as 2 km= 2,000 m. c. Visually display measurement quantities using representations such as number line that feature measurement scale. MP.1, MP.4 <p>KY.4.MD.3- Apply the area and perimeter formulas for rectangles in the real world mathematical problems.</p>	<p>*I can convert customary units of length from one unit to another unit and recognize the relative size of different units.</p> <p>*I can convert customary units of capacity from one unit to another and recognize the relative size of different units.</p> <p>* I can convert customary units of weight from one unit to another and recognize the relative size of different units.</p> <p>*I can determine the appropriate metrics or stand units for measuring objects.</p> <p>* I can describe the relation of measurement units to one another in both metric and standard systems</p>	<p>Envision Math Topic 13- Measurement: Find Equivalence in Units of Measure 13-1- Equivalence with Customary Units of Length 13-2-Equivalence with customary units of capacity 13-3-Equivalence with Customary units of weight 13-4-Equivalence with metric units of Length 13-5- Equivalence with Metric units of Capacity and Mass 13-6 Solve area and Perimeter Problems 13-7 Problem Solving</p> <p>Chapter 13 Test</p>	<p>-Metric Units -Standard Units(Customary) -km -m -cm -kg -g -lb -oz -ml -hr -min -sec -length -Mass -Capacity -Time -Equivalency</p>	<p>4th Quarter (10 days)</p>

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<p>4.OA.5- Generate a number or shape pattern that follows a given rule, identify apparent features of the pattern not explicit in the rule itself. MP.2, MP.3</p>	<p>*I can use a rule to create and extend a number pattern and identify features of the number pattern not described by the rule.</p> <p>*I can use a rule to extend a number pattern, identify features of the number pattern, and use the number pattern to solve the problems.</p> <p>*I can use a rule to predict a number of shape into a pattern.</p> <p>*I can use patterns to help solve problems.</p>	<p>Envision Math Topic 14- Algebra:Generate and Analyze Patterns 14-1 Number Sequences 14-2-Patterns: Number Rules 14-3 Patterns: Repeating Shapes 14-4-Problem Solving</p> <p>Chapter 14 Test</p>	<p>-Patterns -Number Sequences -Analyze</p>	<p>4th Quarter (6 days)</p>

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<p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines, Identify these two dimensional figures. MP.5, MP.6</p>	<p>*I can draw and identify perpendicular, parallel, and intersecting lines. *I can identify and draw, points, lines, line segments, and rays. *I Can identify and draw right angles, acute, angles, and obtuse angles.</p>	<p>Envision Math Topic 15-Geometric Measurement:Understand Concepts of Angles and Angle Measurement 15-1-Line, Rays, and Angles 15-2-Understand Angles and Unit Angles 15-3-Measure with Unit Angles 15-4- Measure and Draw Angles 15-5 Add and Subtract Angle Measures 15-6 Problem Solving</p> <p>Chapter 15 Test</p>	<ul style="list-style-type: none"> -Points -Lines -Line Segment -Ray -Angles -Right -Acute -Obtuse -Perpendicular -Parallel -Two-Dimensional 	<p>4th Quarter (9 days)</p>

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<p>4.G.2- Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles. MP.7</p> <p>4.OA.5- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern not explicit in the rule itself. MP.2, MP.3</p> <p>4.M.5- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint and understand concepts of angle measurement. MP.7</p> <p>4.G.3- Identify lines of symmetry a. Recognize a line of symmetry for a two-dimensional figure. B. Identify line-symmetric figures and draw lines of symmetry.</p>	<p>*I can recognize and draw lines of symmetry and identify line-symmetric figures, *I can draw a figure that has line symmetry. *I can identify an angle and explain how it can be measured *I can use a protractor to measure and sketch angles. *I can explain how the measure of an angle is the sum of its overlapping parts.</p>	<p>Envision Math Topic 16-Lines, Angles, and Shapes 16-1-Lines 16-2 Classify Triangles 16-3-Classify Quadrilaterals 16-4-Line Symmetry 16-5-Draw Shapes with Line Symmetry 16-6 Problem Solving</p> <p>Chapter 16 Test</p>	<p>-Geometric Shape -Endpoint -Degree -Protractor -Angle Measures -Non-Overlapping g -Angle</p>	<p>4th Quarter (8 days)</p>