

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

Course Description

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million; extend understanding of fraction equivalence and ordering; extend understanding of operations on whole numbers to fraction operations; understand decimal notation for fractions, and compare decimal fractions; use the four operations with whole numbers to solve problems; work with factors and multiples; generate and analyze patterns; classify 2-dimensional shapes by properties of their lines and angles; understand the concepts of angle and measure angles; solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit; represent and analyze data;

Scope And Sequence

Timeframe	Unit	Instructional Topics
25 Day(s)	Unit 1 Number Sense and Operations in Base Ten	1. Topic 1 Generalize Place Value Understanding 2. Topic 12 Understand and Compare Decimals 3. Topic 2 Fluently add and subtract Multi-Digit Whole Numbers
30 Day(s)	Unit 2 Number Sense and Operations in Base Ten (Multiplication)	1. Topic 3 Use Strategies and Properties to Multiply by 1 Digit Numbers 2. Topic 4 Use Strategies and Properties to Multiply by 2-Digit Numbers
31 Day(s)	Unit 3 Number Sense and Operations in Base Ten (Division)	1. Topic 5 Use strategies and properties to divide by 1 digit numbers 2. Topic 6 Use Operations With Whole Numbers to Solve Problems 3. Topic 7 Factors and Multiples
23 Day(s)	Unit 4 Number Sense and Operations (Fractions)	1. Topic 8 Extend understand of fraction equivalence and ordering 2. Topic 9 Understand addition and subtraction of fractions
12 Day(s)	Unit 5 Relationships and Algebraic Thinking (Multiplying Fractions)	1. Topic 10 Extend Multiplication Concepts to Fractions
8 Day(s)	Unit 6 Data and Statistics	1. Topic 11 Represent and interpret data on line plots
27 Day(s)	Unit 7 Geometry and Measurement	1. Topic 13 Measurement: Find equivalence in units of measure 2. Topic 15 Geometric Measurement: Understand Concepts of Angles and Angle Measurement 3. Topic 16 Lines, Angles, and Shapes
7 Day(s)	Unit 8 Relationships and Algebraic Thinking (patterns)	1. Topic 14 Algebra: Generate and analyze patterns

Course Details

Unit: Unit 1 Number Sense and Operations in Base Ten

Duration: 25 Day(s)

Unit Description

Students will be able to use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Enduring Understandings/Essential Learner Outcomes

By the end of this unit, students will show mastery of place value understanding through rounding, identify numbers in different forms, and comparing digits. They will also multiply and divide whole numbers.

Academic Vocabulary

place value
millions
period
expanded form
greater than
less than
rounding
conjecture

Assessment

Pretest for Place Value, formatives, and summative attached.

Topic: Topic 1 Generalize Place Value Understanding

Duration: 9 Day(s)

Description

Students will be able to read and write numbers in expanded form, with numerals, and using number names; recognize the relationship between adjacent digits in a multi-digit number; use place value to compare multi-digit whole numbers; use place value to round multi-digit numbers; and use previously learned concepts and skills to construct arguments about place value.

Academic Vocabulary (What terms will students need to know?)

place value
millions

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period
expanded form
greater than symbol
less than symbol
rounding
conjecture

Definition of Mastery

Students will be able to read and write numbers in expanded form, with numerals, and using number names; recognize the relationship between adjacent digits in a multi-digit number; use place value to compare multi-digit whole numbers; use place value to round multi-digit numbers; and use previously learned concepts and skills to construct arguments about place value.

Learning Targets

Students will understand that whenever we get 10 in one place value, we move to the next greater place value. Students will then take this understanding and apply it to reading and writing numbers in expanded form, with numerals, and using number names.

Students will understand, in a multi-digit whole number, each place value is 10 times greater than the one to the right.

Students will use place value understanding to round multi-whole numbers to any place up to one million.

Students will show understanding of greater than, less than, or equal to through place value when comparing numbers.

Students will read, write, and identify multi digit whole numbers up to one million using number names, base ten numerals, and expanded form.

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Topic: Topic 12 Understand and Compare Decimals

Duration: 6 Day(s)

Description

Students will be able to relate fractions and decimals with denominations of 10 and 100, locate and describe fractions and decimals on number lines, compare decimals by reasoning about their size, add fractions with denominators of 10 and 100 by using equivalent fractions, use fractions or decimals to solve word problems involving money, and use the structure of the place-value system for decimals to solve problems.

Academic Vocabulary (What terms will students need to know?)

tenth
hundredth
decimal
decimal point

Definition of Mastery

Students will be able to relate fractions and decimals with denominations of 10 and 100, locate and describe fractions and decimals on number lines, compare decimals by reasoning about their size, add fractions with denominators of 10 and 100 by using equivalent fractions, use fractions or decimals to solve word problems involving money, and use the structure of the place-value system for decimals to solve problems.

Learning Targets

Students will be able to extend understanding of fraction equivalence and ordering.

Students will use a model to understand a fraction as a multiple of a unit fraction

Students will extend understanding of fraction equivalence and ordering.

Students will understand decimal notation for fractions and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to read, write, and identify decimals to the hundredths place using number names, base ten numbers, and expanded form.

Students will be able to read, write, and identify decimals to the hundredths place using number names, base ten numerals, and expanded form.

Topic: Topic 2 Fluently add and subtract Multi-Digit Whole Numbers

Duration: 10 Day(s)

Description

Add and subtract whole numbers mentally using a variety of methods. Round greater whole numbers to estimate sums and differences. Add

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numbers to one million with and without regrouping using the standard algorithm. Use place value and an algorithm to subtract whole numbers. Use number sense and regrouping to subtract across zeros. Use previously learned concepts and skills to reason abstractly and make sense of quantities and their relationships in problem situations.

Academic Vocabulary (What terms will students need to know?)

Adjacent digits
Commutative Property
Associative property
Identify property
Counting on
Compensation
Variable
Algorithm
Inverse operations

Definition of Mastery

Students will be able to add and subtract using whole numbers, round greater whole numbers to estimate sums and differences, add numbers to one million with and without regrouping, use place value to subtract whole numbers, and use number sense to regroup across zeros.

Learning Targets

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Students will demonstrate fluency with addition and subtraction of whole numbers.

Students will understand that whenever we get 10 in one place value, we move to the next greater place value. Students will then take this understanding and apply it to reading and writing numbers in expanded form, with numerals, and using number names.

Unit: Unit 2 Number Sense and Operations in Base Ten
(Multiplication)

Duration: 30 Day(s)

Unit Description

Students will be able to multiply a whole number up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution.

Enduring Understandings/Essential Learner Outcomes

By the end of the unit, students will be able to use mental math to multiply by multiples of 10, 100, and 1,000; round to estimate products; use the distributive property, use mental math strategies for multiplication, use arrays and partial products, use partial products to multiply by 1-digit numbers; multiply by 2 and 3 digit numbers by 1 digit numbers, multiply 4 digit by 1 digit numbers, multiply by 1 digit numbers, problem solving, and multiply 2 digit numbers by 2 digit numbers.

Academic Vocabulary

associative property of multiplication
numerical expression
distributive property
compensation
commutative property of multiplication
partial products
compatible numbers

Assessment

There will be a summative assessment of this topic.

Topic: Topic 3 Use Strategies and Properties to Multiply by 1 Digit Numbers

Duration: 18 Day(s)

Description

Students will be able to use mental math to multiply by multiples of 10, 100, and 1,000; round to estimate products; use the distributive property, use mental math strategies for multiplication, use arrays and partial products, use partial products to multiply by 1-digit numbers; multiply by 2 and 3 digit numbers by 1 digit numbers, multiply 4 digit by 1 digit numbers, multiply by 1 digit numbers, and problem solving.

Academic Vocabulary (What terms will students need to know?)

associative property of multiplication
numerical expression
distributive property
compensation
commutative property of multiplication
partial products

Definition of Mastery

By the end of the topic, students will be able to use mental math to multiply by multiples of 10, 100, and 1,000; round to estimate products; use the distributive property, use mental math strategies for multiplication, use arrays and partial products, use partial products to multiply by

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1-digit numbers; multiply by 2 and 3 digit numbers by 1 digit numbers, multiply 4 digit by 1 digit numbers, multiply by 1 digit numbers, and problem solving.

Learning Targets

Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution.

Students will be able to multiply or divide to solve problems involving a multiplicative comparison.

Students will be able to use the four operations with whole numbers to solve problems.

Students will be able to use the four operations with whole numbers to solve problems.

Topic: Topic 4 Use Strategies and Properties to Multiply by 2-Digit Numbers

Duration: 12 Day(s)

Description

Students will be able to use multiples of 10, rounding, compatible numbers, arrays and partial products, the Distributive Property, multiply 2 digit by 2 digit, and problem solve

Academic Vocabulary (What terms will students need to know?)

Compatible numbers

Definition of Mastery

By the end of the topic, students will be able to use multiples of 10, rounding, compatible numbers, arrays and partial products, the Distributive Property, multiply 2 digit by 2 digit, and problem solve

Learning Targets

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Students will multiply by multiples of 10, 100 and 1,000.

Students will be able to round to estimate products.

Students will be able to use the distributive property to multiply larger numbers.

Students will be able to multiply mentally by using properties of multiplication.

Students will be able to use arrays and partial products to multiply by 1-digit numbers.

Students will be able to multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution.

Unit: Unit 3 Number Sense and Operations in Base Ten (Division)

Duration: 31 Day(s)

Unit Description

Students will use strategies and properties to divide by 1-digit numbers and students will use operations with whole numbers to solve problems.

Enduring Understandings/Essential Learner Outcomes

By the end of this unit, students will be able to use mental math to find quotients, interpret remainders, use division and sharing, divide with 1 digit numbers, and model with math. Students will also be able to solve comparison situations and solve multi-step problems.

Academic Vocabulary

partial quotients

Assessment

Students will complete formative and summative assessments for this unit throughout the topics.

Topic: Topic 5 Use strategies and properties to divide by 1 digit numbers

Duration: 15 Day(s)

Description

Students will be able to use mental math to find quotients, interpret remainders, use division as sharing, divide with 1 digit numbers, and use models with math.

Academic Vocabulary (What terms will students need to know?)

partial products

Definition of Mastery

Students will be able to use mental math to find quotients, interpret remainders, use division as sharing, divide with 1 digit numbers, and use models with math.

Learning Targets

Students will find quotients by estimating.

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Students will be able to find quotients by estimating.

Students will be able to use partial quotients.

Students will be able to divide by 1-digit numbers.

Topic: Topic 6 Use Operations With Whole Numbers to Solve Problems

Duration: 8 Day(s)

Description

Students will be able to interpret comparisons as multiplication or addition equations, use multiplication and division to compare two quantities, solve two-step problems, solve multi-step problems, and make sense and persevere.

Academic Vocabulary (What terms will students need to know?)

There is no academic vocabulary for this topic.

Definition of Mastery

Students will be able to interpret comparisons as multiplication or addition equations, use multiplication and division to compare two quantities, solve two-step problems, solve multi-step problems, and make sense and persevere.

Learning Targets

Students will find quotients by estimating.

Students will be able to use partial quotients.

Students will be able to divide by 1-digit numbers.

Topic: Topic 7 Factors and Multiples

Duration: 8 Day(s)

Description

Students will be able to use arrays to find the factors of a given whole number, use multiplication to find all the factor pairs for a whole number, use repeated reasoning to generalize how to solve problems that are similar, use factors to determine whether a whole number is greater than 1 is prime or composite, and use multiplication to find multiples of a given number.

Academic Vocabulary (What terms will students need to know?)

factor
factor pairs
multiple
generalize
prime number
composite number

Definition of Mastery

Students will be able to use arrays to find the factors of a given whole number, use multiplication to find all the factor pairs for a whole number, use repeated reasoning to generalize how to solve problems that are similar, use factors to determine whether a whole number is greater than 1 is prime or composite, and use multiplication to find multiples of a given number.

Learning Targets

Students will be able to recognize that a whole number is a multiple of each of its factors and find the multiples for a given whole number.

Students will be able to work with factors and multiples.

Unit: Unit 4 Number Sense and Operations (Fractions)

Duration: 23 Day(s)

Unit Description

Students will be able to use area models to recognize and generate equivalent fractions, use a number line to locate and identify equivalent fractions, use models to compare fractions, use models to rename fractions to compare, decompose a fraction or mixed numbers, use tools to subtract fractions, solve problems, count forward or backward on a number line, use number lines to find sums and differences, use models and equivalent fractions to add and subtract mixed numbers, use equivalent fractions to subtract mixed numbers, solve problems, relate fractions and decimals with denominations of 10 and 100, locate and describe fractions and decimals on number lines, compare decimals by reasoning about their size, add fractions with denominators of 10 and 100 by using equivalent fractions, use fractions or decimals to solve word problems involving money, and use the structure of the place-value system for decimals to solve problems.

Enduring Understandings/Essential Learner Outcomes

By the end of this unit, students will be able to use area models to recognize and generate equivalent fractions, use a number line to locate and identify equivalent fractions, use models to compare fractions, and use models to rename fractions to compare.

Academic Vocabulary

equivalent fractions
common factor
benchmark fractions
decompose
compose

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Required Course

mixed numbers

Assessment

Students will take formatives along the way to show understanding and then take a summative assessment at the end of each topic.

Topic: Topic 8 Extend understand of fraction equivalence and ordering

Duration: 8 Day(s)

Description

Students will be able to locate and identify equivalent fractions, use number lines to locate equivalent fractions, use models to compare fractions, and use models to rename fractions to compare.

Academic Vocabulary (What terms will students need to know?)

equivalent fractions
common factor
numerator
denominator
benchmark fractions

Definition of Mastery

Students will be able to locate and identify equivalent fractions, use number lines to locate equivalent fractions, use models to compare fractions, and use models to rename fractions to compare.

Learning Targets

Students will be able to multiply or divide to solve problems involving a multiplicative comparison.

Students will use a model to understand a fraction as a multiple of a unit fraction

Students will extend understanding of fraction equivalence and ordering.

Students will be able to extend understanding of operations on whole numbers to fraction equations.

Students will be able to extend understanding of fractions equivalence and ordering.

Topic: Topic 9 Understand addition and subtraction of fractions

Duration: 15 Day(s)

Description

Students will be able to use fractions strips and number lines to add fractions, decompose a fraction or mixed number into a sum of fractions in more than one way, solve problems involving joining parts of the same whole by adding fractions, use tools such as fractions strips to subtract fractions, solve problems, count forward or backward on a number line, use number lines to estimate fractions sums and differences, use models to add and subtract mixed fractions, and use equivalent fractions and properties with mixed numbers with like denominators.

Academic Vocabulary (What terms will students need to know?)

decompose
compose
mixed number

Definition of Mastery

Students will be able to use fractions strips and number lines to add fractions, decompose a fraction or mixed number into a sum of fractions in more than one way, solve problems involving joining parts of the same whole by adding fractions, use tools such as fractions strips to subtract fractions, solve problems, count forward or backward on a number line, use number lines to estimate fractions sums and differences, use models to add and subtract mixed fractions, and use equivalent fractions and properties with mixed numbers with like denominators.

Learning Targets

Students will be able to extend understanding of operations on whole numbers to fraction equations.

Students will use a model to understand a fraction as a multiple of a unit fraction.

Students will be able to use a model to understand a fraction as a multiple of a unit fraction.

Students will be able to use models to multiply fractions by whole numbers.

Students will be able to use models to multiply fractions by whole numbers.

Students will be able to use symbols and equations to multiply a fraction by a whole number.

Students will be able to use drawings and equations to represent and solve problems involving multiplying a whole number and a mixed number.

Students will be able to use previously learned concepts and skills to represent and solve problems.

Unit: Unit 5 Relationships and Algebraic Thinking (Multiplying Fractions)

Duration: 12 Day(s)

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Unit Description

Students will be able to extend understanding of fraction equivalence and ordering by multiply a fraction by a whole number, and multiply a whole number and a mixed number.

Enduring Understandings/Essential Learner Outcomes

Students will be able to:

1. Use a model to understand a fraction as a multiple of a unit fraction.
2. Use models to multiply fractions by whole numbers.
3. Use symbols and equations to multiply a fraction by a whole number.
4. Use drawings and equations to represent and solve problems involving multiplying a whole number and a mixed number.
5. Use previously-learned concepts and skills to represent and solve problems.

Academic Vocabulary

Unit Fraction
Whole Number
Mixed Number

Assessment

Students will take formatives along the way to show understanding and then take a summative assessment at the end of each topic.

Topic: Topic 10 Extend Multiplication Concepts to Fractions

Duration: 12 Day(s)

Description

Students will use a model to understand a fraction as a multiple of a unit fraction, use models to multiply fractions by whole numbers, use symbols and equations to multiply a fraction by a whole number, use drawings and equations to solve problems, and use skills to represent and solve problems.

Academic Vocabulary (What terms will students need to know?)

Unit Fraction

Learning Targets

Students will use a model to understand a fraction as a multiple of a unit fraction.

Students will be able to use models to multiply fractions by whole numbers.

Students will be able to use symbols and equations to multiply a fraction by a whole number.

Students will be able to use drawings, equations, and skills to solve problems

I can determine the "x" value in a problem with fractions.

Unit: Unit 6 Data and Statistics

Duration: 8 Day(s)

Unit Description

Students will be able to represent and analyze data.

Enduring Understandings/Essential Learner Outcomes

Students will be able to:

- read and interpret data using line plots
- represent data using line plots and interpret data in line plots to solve problems
- solve problems involving line plots and fractions
- and critique the reasoning of others using an understanding of line plots.

Academic Vocabulary

Line plot
Outlier

Assessment

Students will take formatives along the way to show understanding and then take a summative assessment at the end of the topic.

Topic: Topic 11 Represent and interpret data on line plots

Duration: 8 Day(s)

Description

Students will be able to read and interpret data on line plots.

Academic Vocabulary (What terms will students need to know?)

Line plot
Outlier

Learning Targets

Students will be able to represent and analyze data.

Students will be able to represent and analyze data.

Students will be able to interpret line plots.

Students will be able to analyze data in a bar graph.

Students will be able to read and analyze picture graphs.

Unit: Unit 7 Geometry and Measurement**Duration:** 27 Day(s)**Unit Description**

Students will classify 2-dimensional shapes by properties of their lines and angles, understand the concepts of angle and measure angles, and solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Academic Vocabulary

Capacity, quart, gallon, cup, pint, fluid ounce, weight, ounce, pound, ton, millimeter, centimeter, meter, kilometer, mass, liter, gram, milligram, kilogram, perimeter, area, formula, point, line, line segment, ray, right angle, acute angle, obtuse angle, straight angle, degree, unit angle, angle measure, protractor, vertex, parallel lines, perpendicular lines, intersecting lines, right triangle, obtuse triangle, acute triangle, equilateral triangle, isosceles triangle, scalene triangle, parallelogram, rectangle, square, rhombus, trapezoid, line symmetric, line of symmetry.

Assessment

Students will take formatives along the way to show understanding and then take a summative assessment at the end of each topic.

Topic: Topic 13 Measurement: Find equivalence in units of measure**Duration:** 10 Day(s)**Description**

Students will recognize the relative size of customary units of length and make conversions, recognize relative size of customary units, recognize relative size of metric units, and find unknown lengths and widths of rectangles.

Academic Vocabulary (What terms will students need to know?)

capacity
quart
gallon
cup
pint
fluid ounce
weight
ounce
pound
ton
millimeter

Definition of Mastery

Students will recognize the relative size of customary units of length and make conversions, recognize relative size of customary units, recognize relative size of metric units, and find unknown lengths and widths of rectangles.

Learning Targets

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Students will be able to solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Students will be able to solve problems involving measurements and conversion of measurements from a larger unit to a smaller unit.

Students will be able to find unknown lengths and widths of rectangles.

Topic: Topic 15 Geometric Measurement: Understand Concepts of Angles and Angle Measurement**Duration:** 7 Day(s)**Description**

Students will be able to recognize and draw lines, rays, and angles with different measures; find the measure of an angle that turns through a fraction of a circle; use known angles to measure; use a protractor to measure; use addition and subtraction to solve problems, and use appropriate tools, such as a protractor and ruler, to solve problems.

Academic Vocabulary (What terms will students need to know?)

Point, line, line segment, ray, right angle, acute angle, obtuse angle, straight angle, degree, unit angle, angle measure, protractor, vertex,

Learning Targets

Students will be able to recognize and draw lines, rays, and angles with different measures.

Students will be able to understand the concepts of angle and measure angles.

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to recognize and draw lines, rays, and angles with different measures.

Students will be able to find the measure of an angle that turns through a fraction of a circle.

Students will be able to use a protractor to measure.

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Students will be able to use addition and subtraction to solve problems, and use appropriate tools, such as a protractor and ruler, to solve problems.

Topic: Topic 16 Lines, Angles, and Shapes

Duration: 10 Day(s)

Description

Students will classify 2-dimensional shapes by properties of their lines and angles, and understand the concepts of angle and measure angles,

Academic Vocabulary (What terms will students need to know?)

parallel lines, perpendicular lines, intersecting lines, right triangle, obtuse triangle, acute triangle, equilateral triangle, isosceles triangle, scalene triangle, parallelogram, rectangle, square, rhombus, trapezoid, line symmetric, line of symmetry.

Learning Targets

Students will draw and identify lines.

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to recognize and draw lines, rays, and angles with different measures.

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to classify triangles.

Students will be able to classify quadrilaterals.

Students will be able to draw line symmetry and draw shapes with line symmetry.

Students will be able to use understanding of two dimensional shapes to critique the reasoning of others.

Unit: Unit 8 Relationships and Algebraic Thinking (patterns)

Duration: 7 Day(s)

Unit Description

Students will be able to create or extend a number sequence based on a rule, use a rule to extend a number pattern and solve a problem, generate a pattern that follows a given rules, and solve problems by using patterns.

Enduring Understandings/Essential Learner Outcomes

Students will be able to create or extend a number sequence based on a rule, use a rule to extend a number pattern and solve a problem, generate a pattern that follows a given rules, and solve problems by using patterns.

Academic Vocabulary

rule
repeating pattern

Assessment

Students will take formatives along the way to show understanding and then take a summative assessment at the end of the topic.

Topic: Topic 14 Algebra: Generate and analyze patterns

Duration: 7 Day(s)

Description

Students will be able to create or extend a number sequence based on a rule, use a rule to extend a number pattern and solve a problem, generate a pattern that follows a given rules, and solve problems by using patterns.

Academic Vocabulary (What terms will students need to know?)

rule

Definition of Mastery

Students will be able to create or extend a number of sequence based on a rule.

Learning Targets

Students will be able to create or extend a number pattern.

Students will be able to generate and analyze patterns.

Activities (Lesson Plans)

Unit 1 Number Sense and Operations in Base Ten

Topic 1 Generalize Place Value Understanding

Pretest for Topic 1

Students will take a pretest on topic 1.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

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1-1 Numbers Through One Million

Read and write multi-digit whole numbers using base-10 numerals, number names, and expanded form.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

1-2 Place Value Relationships

Students will be able to recognize the relationship between adjacent digits in a multi-digit number.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

1-3 Compare Whole Numbers

Students will use place value to compare multi-digit numbers.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

1-4 Round Whole Numbers

Students will use place value to round multi-digit whole numbers.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

1-5 Construct Arguments

Students will be able to recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Summative Place Value Assessment

Summative test for topic 1 on place value.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Review for Assessment on Topic 1

Students will do multiple activities to wrap up and prepare for the assessment over Topic 1.

Author: Lynette Randolph Shared: Yes Type: Educator Submitted

Rounding Whole Numbers

Students will use dry erase boards to do a "Show Me" activity from a rounding whole numbers lesson on the Smart Board.

Author: Sarah Smith Shared: Yes Type: Educator Submitted

Topic 12 Understand and Compare Decimals

Topic 12-1 Fractions and Decimals

Students will relate fractions and decimals with denominations of 10 and 100.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 12-2 Fractions and decimals on number line

Students will be able to locate and describe fractions and decimals on the number lines.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 12-3 Compare Decimals

Students will be able to compare decimals.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 12-5 Solve word problems involving money

Students will use fractions or decimals to solve word problems involving money

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 12-6 Math Practices and Problem Solving

Students will use the structure of the place-value system for decimals to solve problems

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Expanded Form of Decimals

Students will be able to write decimals in expanded form.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 2 Fluently add and subtract Multi-Digit Whole Numbers

Topic 2 Pretest

Students will take a pretest for topic 2.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

2-1 Mental Math: Find Sums and Differences

Students will be able to add and subtract whole numbers using a variety of methods.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

2-2 Mental Math: Estimate Sums and Differences

Students will be able to round greater whole numbers to estimate sums and differences.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

2-3 Add Whole Numbers

Students will be able to add whole numbers to one million with and without regrouping using the standard algorithm.

Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

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2-4 Subtract Whole Numbers

Students will use place value and an algorithm to subtract whole numbers

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

2-5 Subtract Across Zeros

Students will use number sense and regrouping to subtract across zeros

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

2-6 Reasoning

Students will use previously learned concepts and skills to reason abstractly and make sense of quantities and their relationships in problem situations.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 2 Assessment

Students will be able to add and subtract using whole numbers, round greater whole numbers to estimate sums and differences, add numbers to one million with and without regrouping, use place value to subtract whole numbers, and use number sense to regroup across zeros.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Unit 2 Number Sense and Operations in Base Ten (Multiplication)

Topic 3 Use Strategies and Properties to Multiply by 1 Digit Numbers

3-1 Mental Math:

Students will use basic facts and place-value patterns to find products when one factor is 10, 10-0, or 1,000

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-2 Mental Math: Round to Estimate

Students will use rounding to estimate products and check if answers are reasonable

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-3 The Distributive Property

Students will use the Distributive Property to multiply larger numbers

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-4 Mental Math Strategies

Students will use place value and properties of operations to multiply mentally

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-5 Arrays and Partial Products

Students will use arrays and partial products to solve

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-6 Use Partial Products to Multiply

Students will be able to use place value and partial products to multiply 3 and 4 digit numbers by 1 digit numbers.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-7 Multiply 2 and 3 Digit Numbers By 1 Digit

Students will be able to multiply 2 digit and 3 digit numbers by 1 digit numbers.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-8 Multiply 4 Digit by 1 Digit Numbers

Students will be able to multiply 4 digit numbers by 1 digit numbers.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-9 Multiply by 1 Digit Numbers

Students will be able to multiply 2,3, and 4 digit numbers by 1 digit numbers. They will also estimate answers.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

3-10 Model With Math

Students will be able to use previously learned concepts and skills to represent and solve problems.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 3 Assessment

Students will be able to use mental math to multiply by multiples of 10, 100, and 1,000; round to estimate products; use the distributive property, use mental math strategies for multiplication, use arrays and partial products, use partial products to multiply by 1-digit numbers; multiply by 2 and 3 digit numbers by 1 digit numbers, multiply 4 digit by 1 digit numbers, multiply by 1 digit numbers, and problem solving.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 4 Use Strategies and Properties to Multiply by 2-Digit Numbers

4-1 Multiply Multiples of 10

Students will use mental math strategies to multiply 2-digit by 2-digit multiples of ten

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

4-2 Use models to multiply 2-digit numbers by mult Students will use models and properties of operations to multiply 2-digit numbers by multiples of ten. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-3 Estimate: Use Rounding Students will estimate products for 2 digit by 2 digit multiplication problems by rounding the factors to multiples of ten. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-5 Arrays and Partial Products Students will be able to use arrays, place value, partial products, and properties of operations to multiply two 2-digit numbers. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-6 Multiply Using the Distributive Property Students will use the distributive property and an area model to multiply two 2-digit numbers. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-7 Use Partial Products to Multiply by 2-Digit Nu The students will be able to use place value and partial products to calculate products of 2-digit by 2-digit multiplication problems. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-8 Multiply 2 Digit Numbers By Multiples of 10 Students will be able to use area models and place value strategies to multiply 2 digit numbers by multiples of 10. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-9 Multiply 2-Digit by 2-Digit Numbers Students will use the expanded and the standard algorithm to multiply 2-digit by 2-digit numbers. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-10 Continue to Multiply by 2-Digit Numbers Students will be able to use models and algorithms to solve 2 digit by 2 digit multiplication problems. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
4-11 Make Sense and Persevere Students will be able to make sense of problems and persevere in solving them. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Unit 3 Number Sense and Operations in Base Ten (Division)

Topic 5 Use strategies and properties to divide by 1 digit numbers

5-1, Mental Math: Find Quotients Students will be able to use mental math and place value strategies to divide multiples of 10 and 100 by 1 digit numbers. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
5-4 Interpret Remainders Students will be able to solve division problems and interpret remainders. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
5-5 Division as Sharing Students will be able to use place value and drawings to divide 2 and 3 digit numbers by 1 digit numbers. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
5-8 Divide With 1-Digit Numbers Students will be able to divide 2 and 3 digit numbers by 1 digit numbers using the standard division algorithm. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
5-9 Continue to Divide With 1-Digit Numbers Students will be able to divide 4 digit numbers by 1 digit numbers using the standard division algorithm. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
5-10 Model With Math Students will be able to use previously-learned concepts and skills to model and solve problems. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

Topic 6 Use Operations With Whole Numbers to Solve Problems

6-1 Solve Comparison Situations Students will be able to interpret comparisons as multiplication or addition equations. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted
6-2 Continue to solve comparison situations Students will be able to use multiplication and division to compare two quantities. Author: Denise Clinkingbeard Shared: Yes Type: Educator Submitted

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

6-3 Solve Multi-Step Problems

Students will be able to solve 2-step problems by finding and solving the hidden question first.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

6-4 Solve More Multi-Step Problems

Students will be able to solve multi-step word problems.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

6.5 Make Sense and Persevere

Students will be able to make sense of a multi-step word problem and keep working until it is solved.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 7 Factors and Multiples

7-1 Understand factors

Students will be able to use arrays to find the factors of a given whole number.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

7-2 Factors

Students will be able to use multiplication to find all the factor pairs for a whole number.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

7-3 Repeated Reasoning

Students will use repeated reasoning to generalize how to solve problems that are similar

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

7-4 Prime and Composite Numbers

Students will use factors to determine whether a whole number greater than 1 is prime or composite

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

7-5 Multiples

Students will be able to use multiplication to find multiples of a given number.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Unit 4 Number Sense and Operations (Fractions)

Topic 8 Extend understand of fraction equivalence and ordering

8-1 Equivalent Fractions: Area Models

Students will be able to use area models to recognize and generate equivalent fractions.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-2 Equivalent Fractions: Number Lines

Students will be able to use a number line to locate and identify equivalent fractions.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-3 Generate Equivalent Fractions: Multiplication

Use multiplication to find equivalent fractions.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-4 Generate Equivalent Fractions: Division

Students will use division to find equivalent fractions.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-5 Use Benchmarks to compare Fractions

Students will be able to use benchmarks, area models, and number lines to compare fractions

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-6 Compare Fractions

Students will use models or rename fractions to compare

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

8-7 Construct Arguments

Students will construct arguments about fractions

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 9 Understand addition and subtraction of fractions

9-1 Model addition of fractions

Students will use fraction strips and number lines to add fractions.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

9-2 Decompose Fractions

Students will be able to decompose a fraction or mixed number into a sum of fractions in more than one way.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

9-3 Add Fractions with like denominators Students will solve problems involving joining parts of the same whole by adding fractions Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-4 Model Subtraction of Fractions Students will use tools to subtract fractions Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-5 Subtract Fractions with like Denominators Students will solve problems involving separating parts of the same whole by subtracting fractions Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-6 Add and Subtract Fractions with like Denominat Students will count forward or backward on a number line to add or subtract Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-6 Add and subtract fractions with like denominat Students will count forward or backward on a number line to add or subtract Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-7 Estimate fraction sums and difference Students will be able to use number lines and benchmark fractions to estimate fraction sums and differences. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-8 Model Addition and Subtraction of Mixed Number Students will be able to use models and equivalent fractions to add and subtract mixed numbers. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-9 Add Mixed Numbers Students will be able to use equivalent fractions and properties of operations to add mixed numbers with like denominators. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-10 Subtract Mixed Numbers Students will be able to use equivalent fractions, properties of operations, and the relationship between addition and subtraction to subtract mixed numbers with like denominators. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
9-11 Model With Math Students will be able to use previously learned concepts and skills to represent and solve problems. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted

Unit 5 Relationships and Algebraic Thinking (Multiplying Fractions)

Topic 10 Extend Multiplication Concepts to Fractions

10-1 Fractions as Multiples of Unit Fractions:Mode Students will be able to understand a fraction as a multiple of a unit fraction. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
10-2 Multiply a fraction by a whole number: use mo Students will be able to use models to multiply fractions by whole numbers. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
10-3 Multiply a Fraction by Whole Numbers: Symbols Students will be able to use symbols and equations to multiply a fraction by a whole number. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
10-4 Multiply a Whole Number and a Mixed Number Students use drawings and equations to represent and solve problems involving multiplying a whole number and a mixed number. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
10-6 Model with Math Students will use previously-learned concepts and skills to represent and solve problems. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted

Unit 6 Data and Statistics

Topic 11 Represent and interpret data on line plots

11-1 Read Line Plots Students will read and interpret data using line plots. Author: Denise Clinkingbeard Shared: Yes	Type: Educator Submitted
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4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

11-2 Make Line Plots

Students will represent data using line plots and interpret data in line plots to solve problems.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

11-3 Use line plots to solve problems

Students will use line plots to solve problems

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

11-4 Critique reasoning in problem solving

Students will critique the reasoning of others using an understanding of line plots

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

11-5 Analyze and read bar graphs

Students will be able to analyze and read bar graphs.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

11-6 Read and analyze picture graphs

Students will be able to read and analyze picture graphs

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Unit 7 Geometry and Measurement

Topic 13 Measurement: Find equivalence in units of measure

13-1 Equivalence with customary units of length

Students will be able to recognize the relative size of customary units of length and convert from a larger unit to a smaller unit.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-2 Equivalence with customary units of capacity

Students will be able to recognize the relative size of customary units of capacity and convert from a larger unit of smaller unit.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-3 Equivalence with customary units of weight

Students will recognize the relative size of customary units of weight and convert from a larger unit to a smaller unit

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-4 Equivalence with metric units of length

Students will recognize the relative size of metric units of length and convert from a larger unit to a smaller unit

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-5 Equivalence with metric units of capacity and

Students will recognize the relative size of metric units of capacity and mass, and convert from a larger unit to a smaller unit

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-6 Solve perimeter and area problems

Students will find the unknown length or width of a rectangle

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

13-7 Math Practices and Problem Solving

Students will be able to be precise when solving measurement problems.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 15 Geometric Measurement: Understand Concepts of Angles and Angle Measurement

15-1 Lines, Rays, and Angles

Students will be able to recognize and draw lines, rays, and angles with different measures.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

15-2 Understand Angles and Unit Angles

Students will find the measure of an angle that turns through a fraction of a circle.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

15-3 Measure With Unit Angles

Students will be able to use known angle measures to measure unknown angles.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

15-4 Measure and Draw Angles

Students will be able to use a protractor to measure and draw angles.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

15-6 Use Appropriate Tools

Students will be able to use appropriate tools, such as a protractor and ruler, to solve problems.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Topic 16 Lines, Angles, and Shapes

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

16-1 Lines

Students will draw and identify perpendicular, parallel, and intersecting lines.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

16-2 Classify Triangles

Students will be able to classify triangles by line segments and angles.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

16-3 Classify Quadrilaterals

Students will be able to classify quadrilaterals by lines and angles.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

16-4 Line symmetry

Students will recognize and draw lines of symmetry

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

16-5 Draw Shapes With Line Symmetry

Students will be able to draw figures that have line symmetry.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

16-6 Math practices and problem solving

Students will use understanding of two dimensional shapes to critique the reasoning of others

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Unit 8 Relationships and Algebraic Thinking (patterns)

Topic 14 Algebra: Generate and analyze patterns

14-1 Number Sequences

Students will be able to create or extend a number sequence based on a rule.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

14-2 Patterns: Number Rules

Students will be able to use a rule to extend a number pattern and solve a problem.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

14-3 Patterns: Repeating Shapes

Students will be able to generate a shape pattern that follows a given rule and predict a shape in the pattern.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

14-4 Look For and Use Structure

Students will be able to solve problems by using patterns.

Author: Denise Clinkingbeard

Shared: Yes

Type: Educator Submitted

Learning Targets

I can determine the "x" value in a problem with fractions.

Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution.

Students will understand that whenever we get 10 in one place value, we move to the next greater place value. Students will then take this understanding and apply it to reading and writing numbers in expanded form, with numerals, and using number names.

Students will be able to analyze data in a bar graph.

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to classify 2-dimensional shapes by properties of their lines and angles.

Students will be able to classify quadrilaterals.

Students will be able to classify triangles.

Students will be able to create or extend a number pattern.

Students will be able to divide by 1-digit numbers.

Students will be able to divide by 1-digit numbers.

Students will be able to draw line symmetry and draw shapes with line symmetry.

Students will be able to extend understanding of fraction equivalence and ordering.

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Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

Students will be able to extend understanding of fractions equivalence and ordering.

Students will be able to extend understanding of operations on whole numbers to fraction equations.

Students will be able to find quotients by estimating.

Students will be able to find the measure of an angle that turns through a fraction of a circle.

Students will be able to find unknown lengths and widths of rectangles.

Students will be able to generate and analyze patterns.

Students will be able to interpret line plots.

Students will be able to multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution.

Students will be able to multiply mentally by using properties of multiplication.

Students will be able to multiply or divide to solve problems involving a multiplicative comparison.

Students will be able to read and analyze picture graphs.

Students will be able to read, write, and identify decimals to the hundredths place using number names, base ten numbers, and expanded form.

Students will be able to read, write, and identify decimals to the hundredths place using number names, base ten numerals, and expanded form.

Students will be able to recognize and draw lines, rays, and angles with different measures.

Students will be able to recognize and draw lines, rays, and angles with different measures.

Students will be able to recognize that a whole number is a multiple of each of its factors and find the multiples for a given whole number.

Students will be able to represent and analyze data.

Students will be able to represent and analyze data.

Students will be able to round to estimate products.

Students will be able to solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Students will be able to solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Students will be able to solve problems involving measurements and conversion of measurements from a larger unit to a smaller unit.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand decimal notation for fractions, and compare decimal fractions.

Students will be able to understand the concepts of angle and measure angles.

Students will be able to use a model to understand a fraction as a multiple of a unit fraction.

Students will be able to use a protractor to measure.

Students will be able to use addition and subtraction to solve problems, and use appropriate tools, such as a protractor and ruler, to solve problems.

Students will be able to use arrays and partial products to multiply by 1-digit numbers.

Students will be able to use drawings and equations to represent and solve problems involving multiplying a whole number and a mixed number.

Students will be able to use drawings, equations, and skills to solve problems

Students will be able to use models to multiply fractions by whole numbers.

Students will be able to use models to multiply fractions by whole numbers.

4th-Math MLS

Mathematics

Grade(s) 4th, Duration 1 Year, 1 Credit
Required Course

Students will be able to use models to multiply fractions by whole numbers.

Students will be able to use partial quotients.

Students will be able to use partial quotients.

Students will be able to use previously learned concepts and skills to represent and solve problems.

Students will be able to use symbols and equations to multiply a fraction by a whole number.

Students will be able to use symbols and equations to multiply a fraction by a whole number.

Students will be able to use the distributive property to multiply larger numbers.

Students will be able to use the four operations with whole numbers to solve problems.

Students will be able to use the four operations with whole numbers to solve problems.

Students will be able to use understanding of two dimensional shapes to critique the reasoning of others.

Students will be able to work with factors and multiples.

Students will classify 2-dimensional shapes by properties of their lines and angles.

Students will demonstrate fluency with addition and subtraction of whole numbers.

Students will draw and identify lines.

Students will extend understanding of fraction equivalence and ordering.

Students will extend understanding of fraction equivalence and ordering.

Students will find quotients by estimating.

Students will multiply by multiples of 10, 100 and 1,000.

Students will read, write, and identify multi digit whole numbers up to one million using number names, base ten numerals, and expanded form.

Students will show understanding of greater than, less than, or equal to through place value when comparing numbers.

Students will understand decimal notation for fractions and compare decimal fractions.

Students will understand, in a multi-digit whole number, each place value is 10 times greater than the one to the right.

Students will use a model to understand a fraction as a multiple of a unit fraction

Students will use a model to understand a fraction as a multiple of a unit fraction.

Students will use place value understanding to round multi-whole numbers to any place up to one million.

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.

Use place value understanding and properties of operations to perform multi-digit arithmetic with numbers up to one million.
