

Fourth Grade Math



Course Overview

Fourth grade Math students sharpen their computational and problem-solving skills while applying mathematical concepts to real-world problems. Students will:

- Continue to develop computational skills using larger numbers up to millions
- Estimate sums and differences before finding exact solutions
- Achieve rapid fluency with basic number facts
- Through a proprietary, research-based series of

lessons, develop strategies for solving word problems that progress from simple addition problems to problems with complex data

- Use geometry to determine perimeter, volume, and area in both English and metric units
- Develop research-based intuitive understanding of fractions together with practical computational skills
- Expand understanding of probability and its link to fractions

Course Outline

Place Value

- Thousands
- Millions and Greater Numbers
- Place Value
- Comparing and Ordering Whole Numbers
- Number Sense: Using a Number Line
- Making Change
- Comparing and Ordering Money
- Rounding
- Working with Money

Addition and Subtraction Concepts

- Addition Properties and Addition Strategies
- Subtraction Concepts
- Addition and Subtraction Sentences
- Mental Math
- Estimating Sums and Differences
- Adding and Subtracting Money
- Checking Addition and Subtraction
- Addition and Subtraction Applications

Addition and Subtraction

- Front-End Estimation
- Adding with Regrouping
- Three- and Four-Digit Addition
- Three or More Addends
- Subtracting with Regrouping
- Subtraction: Regrouping Twice
- Three- and Four-Digit Subtraction
- Zeros in Subtraction
- Larger Sums and Differences

Multiplying by One and Two Digits

- Multiplication Properties
- Missing Factors
- Multiplication Models
- Special Factors

- Multiplying by One-Digit Numbers
- Products: Front-End Estimation
- Multiplying with Regrouping
- Multiplying Three-Digit Numbers
- Multiplying Money
- Multiplying Four-Digit Numbers
- Patterns in Multiplication
- Estimating Products
- Multiplying by Two-Digit Numbers
- More Multiplying by Two-Digit Numbers
- Multiplying with Three-Digit Numbers

Dividing by One Digit

- Division Concepts
- Missing Numbers in Division
- Number Patterns
- Estimating in Division
- One-Digit Quotients
- Divisibility
- Two-Digit Quotients
- More Two-Digit Quotients
- Three-Digit Quotients
- More Difficult Quotients
- Zeros in the Quotient
- Larger Numbers in Division
- Dividing Money
- Order of Operations
- Finding Averages

Dividing by Two Digits

- Division Patterns
- Divisors: Multiples of Ten
- Estimating Quotients
- Two-Digit Dividends
- Three-Digit Dividends
- Trial Quotients
- Greater Quotients
- Teens as Divisors



- Four-Digit Dividends
- Zero in the Quotient and Greater Dividends

Measurement

- Measuring with Inches
- Renaming Units of Length
- Computing Customary Units
- Customary Units of Capacity
- Customary Units of Weight
- Measuring and Working with Metric Units
- Metric Units of Capacity
- Metric Units of Mass and Weight
- Temperature
- Time and Elapsed Time

Statistics and Probability

- Graphing Sense
- Making Pictographs and Bar Graphs
- Line Graphs
- Line Graphs II
- Circle Graphs
- Combinations
- Predicting Probability
- Events and Outcomes

Fractions

- Writing Fractions
- Estimating Fractions
- Equivalent Fractions
- Writing Equivalent Fractions
- Factors
- Fractions: Lowest Terms
- Mixed Numbers
- Comparing Fractions
- Ordering Fractions

Fractions: Addition and Subtraction

- Adding: Like Denominators
- Subtracting: Like Denominators
- Improper Fractions
- Estimating with Mixed Numbers
- Add and Subtract Mixed Numbers
- Multiples
- Adding: Unlike Denominators
- Subtracting: Unlike Denominators
- Computing Probability
- Finding Parts of Numbers

Decimals

- Tenths and Hundredths
- Decimals Greater than 1.0

- Decimal Place Value
- Comparing Decimals
- Ordering Decimals
- Rounding Decimals
- Adding Decimals
- Subtracting Decimals
- Estimation with Decimals
- Dividing with Money
- Problem-Solving Strategy: Multistep Problem

Geometry

- Points, Lines, and Line Segments
- Rays and Angles
- Parallel and Perpendicular Lines
- Circles
- Polygons
- Quadrilaterals
- Triangles
- Similar Figures
- Slides, Flips, and Turns
- Coordinate Geometry

Perimeter, Area, and Volume

- Using Perimeter Formulas
- Area
- Using the Area Formulas
- Space Figures
- Polygons
- Spatial Relationships
- Volume

Moving On: Algebra

- Number Sentences
- Finding Missing Numbers
- Functions
- Missing Symbols
- Number Line

Standard Curriculum Items

Math Textbook, Grade 4
Base-10 Blocks

NOTE: List subject to change.