



## Math Curriculum Overview

### Kindergarten

By the end of kindergarten, students will:

- Know number names and count sequence
- Count to tell the number of objects
- Compare numbers
- Understand the purpose of addition and subtraction
- Gain a foundation for place value
- Describe measurable attributes
- Classify and count objects in various categories

### First Grade

By the end of first grade, students will:

- Represent and solve problems using addition and subtraction
- Add and subtract within 20
- Extend their counting sequence
- Understand and use place value to add and subtract
- Measure lengths indirectly and with length units
- Represent and interpret data
- Recognize shapes and their attributes

### Second Grade

By the end of second grade, students will:

- Represent and solve problems using addition and subtraction
- Add and subtract within 20
- Work with groups to understand the foundation for multiplication
- Understand and use place value to add and subtract
- Estimate and measure lengths in standard units
- Relate length to addition and subtraction
- Work with time and money
- Represent and interpret data
- Recognize shapes and their attributes

## Third Grade

By the end of third grade, students will:

- Represent and solve problems with multiplication and division
- Understand the relationship between multiplication and division
- Multiply and divide within 100
- Solve problems involving the four operations and explain arithmetic patterns
- Use place value to solve multi-digit arithmetic
- Understand fractions as numbers
- Solve problems using measurement and estimation
- Understand the concept of area and relate it to multiplication and addition
- Represent and interpret data
- Recognize perimeter
- Recognize shapes and their attributes

## Fourth Grade

By the end of fourth grade, students will:

- Use the four operations to solve problems
- Gain familiarity with factors and multiples
- Generate and analyze patterns of numbers
- Understand place value for multi-digit whole numbers and use it for multi-digit arithmetic
- Understand fraction equivalence and ordering
- Build fractions from unit fractions
- Understand decimal notation for fractions and compare decimal fractions
- Solve problems with measurement and conversion of measurement
- Understand the concepts of angles and measure angles

## Fifth Grade

By the end of fifth grade, students will:

- Write and interpret numerical expressions
- Analyze patterns and relationships of numbers
- Understand the place value system
- Perform operations with multi-digit whole numbers and decimals to the hundredths
- Use equivalent fractions as a strategy to add and subtract fractions
- Apply understanding of multiplication and division
- Convert like measurements
- Represent and interpret data
- Understand the concept of volume
- Graph points on a coordinate plane to solve mathematical problems
- Classify two-dimensional figures based on their properties