

## Pre-Kindergarten

- Counting Skills – corresponds one to one, counts to 30, recognizes numbers
- Estimation Skills – compares using “more than,” “less than,” “same.”
- Classification Skills – sorts by color, size, and shape
- Pattern Skills – copies a pattern, extends a pattern that repeats
- Graphs – interprets simple graphs
- Geometry – recognizes basic shapes

## Kindergarten

Instructional Strands:

- Addition and Subtraction
- Counting
- Functions, relation, attributes and patterns
- Geometry
- Graphs
- Measurement
- Money recognition and identification
- Numeration
- Place value
- Skip counting
- Time

## First Grade

Instructional Strands:

- Emphasis on previous mathematical strands on a more complex level
- Problem solving
- Number sense

## Second Grade

Instructional Strands:

- Emphasis on previous mathematical strands on a more complex level
- Numbers and routines
- Addition and subtraction facts
- Place value, money, and time
- 3-D and 2-D shapes
- Whole-number operations and number stories
- Patterns and rules
- Fractions
- Measurement
- Decimals and place value

### Third Grade

Instructional Strands:

- Emphasis on previous mathematical stands on a more complex level
- Adding and subtracting whole numbers
- Linear measures and area
- Multiplication and division
- Place value in whole numbers and decimals
- Geometry
- Fractions
- Measurement and data
- Probability

### Fourth Grade

Instructional Strands:

- Emphasis on previous mathematical strands on a more complex level
- Geometric figures
- Organizing data
- Multiplication and division – number sentences and algebra
- Decimals
- Estimation and computation of larger numbers
- Fractions, chance and probability
- Perimeter and area
- Fractions, decimals and percents
- 3-D shapes, weight, volume, and capacity
- Rates

### Fifth Grade

Instructional Strands:

- Emphasis on previous mathematical strands on a more complex level
- Number theory
- Estimation and computation
- Fractions, decimals, and percents
- Exponent and negative numbers
- Fractions and ratio
- Coordinates, area, volume, and capacity
- Algebra concepts and skills
- Volume
- Probability, ratios, and rates

## Sixth through Eighth Grade

### Grade 6

Grade 6 is the introduction into middle school math. Students explore many aspects of math, including algebra, problem solving, fractions, integers, decimals, and simple geometry. A variety of examples, demonstrations, visuals, technology, manipulatives and group work are utilized to help clarify the concepts.

- Number Patterns and Algebra
  - Statistics and Graphs
  - Adding and Subtracting Decimals
  - Multiplying and Dividing Decimals
  - Fractions and Decimals
  - Adding and Subtracting Fractions
  - Multiplying and Dividing Fractions
  - Algebra: Integers
  - Algebra: Solving Equations
  - Measurement
  - Geometry: Measuring Area and Volume
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### Grade 7

Math 7 provides instruction that includes a balance among conceptual understanding, connection to prior knowledge, skill proficiency, and problem solving experiences. A variety of examples, demonstrations, visuals, technology, manipulatives and group work are utilized to help clarify the concepts. Mastery of the objectives of this course will prepare the student for success in Pre-Algebra, Algebra, and subsequent high school courses.

- Data and Problem Solving
  - Angles, Integers, and Equations
  - Fractions, Decimals, and Applications
  - Geometry and Number Applications
  - Percentages and Applications
  - Applications with Geometric Shapes
  - Volume and Rotations
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### Pre-Algebra

Pre-Algebra is designed as a foundation for Algebra. In covering the various areas listed below the course includes graphing, group work, and self study. A variety of examples, demonstrations, visuals, technology, manipulatives and group work are utilized to help clarify the concepts. Mastery of the objectives of this course will prepare the student for success in Algebra and subsequent high school courses.

- Expressions, Equations, and Functions
- Solving Linear Equations
- Proportional Reasoning
- Graphing Relations and Functions
- Analyzing Linear Equations
- Solving Linear Inequalities
- Solving Systems of Linear Equations and Inequalities
- Polynomials
- Factoring
- Quadratic and Exponential Functions
- Rational Expressions and Equations
- Radical Expressions and Equations

## **Algebra I**

Algebra I is a college preparatory course focusing on both the structure of algebra and the development of problem solving skills and serves as the foundation for all further studies in upper level math in both high school and college. Students will analyze and solve complex situations utilizing problem solving, decision-making, and logical reasoning tools.

- Pre-Algebra Review
  - Proportional Reasoning
  - Graphing Relations and Functions
  - Linear Equations
  - Linear Inequalities
  - Solving Systems of Equations
  - Polynomials
  - Factoring
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