

Fifth Grade Concepts and Student Outcomes

[District 102 Priority Standards - Fifth Grade](#)

Unit 1: Addition and Subtraction with Fractions

Student Outcomes - In Grade 5, children will:

- Use number lines to represent equivalent fractions
- Express fractions with unlike denominators in terms of the same unit fraction so they can be added or subtracted
- Use bar models to visualize a sum or difference
- Use equations and models to solve real world problems
- Use estimation to determine whether answers are reasonable

[Unit 1 Family Letter](#)

[Unit 1 Overview](#)

[Unit 1 Background](#)

Unit 2: Addition and Subtraction with Decimals

Student Outcomes - In Grade 5, children will:

- Extend their understanding of the relationship between adjacent place values to compare and round decimals to thousandths
- Use the same place value understanding for adding and subtracting decimals that they used for adding and subtracting whole numbers
- Use concrete models, number lines, or drawings to represent decimals
- Use different methods to add and subtract decimals

[Unit 2 Family Letter](#)

[Unit 2 Overview](#)

[Unit 2 Background](#)

Unit 3: Multiplication and Division with Fractions

Student Outcomes - In Grade 5, children will:

- Use comparison bars to solve multiplicative comparison problems involving fractions
- Use number lines to solve problems involving non-unit fractions
- Use area models to solve problems involving fractions
- Use bar models to multiply, compare, and divide fractions

[Unit 3 Family Letter](#)

[Unit 3 Overview](#)

[Unit 3 Background](#)

Unit 4: Multiplication with Whole Numbers and Decimals

Student Outcomes - In Grade 5, children will:

- Represent multiplying decimals with money and drawings
- Use strategies based on place value and properties to multiply decimal numbers
- Write equations to represent multiplication situations

[Unit 4 Family Letter](#)

[Unit 4 Overview](#)

[Unit 4 Background](#)

Unit 5: Division with Whole Numbers and Decimals

Student Outcomes - In Grade 5, children will:

- Connect methods for whole numbers to computing with decimals
- Explain patterns in the number of zeros of the product when dividing by powers of 10
- Decompose factors into base-ten units and apply the Distributive Property
- Use strategies based on place value, the properties of operations, and/or the relationship between multiplication and division
- Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models

[Unit 5 Family Letter](#)

[Unit 5 Overview](#)

[Unit 5 Background](#)

Unit 6: Operations and Word Problems

Student Outcomes - In Grade 5, children will:

- Draw a model to solve comparison problems
- Draw visual fraction models or write equations to represent the problem
- Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers
- Use strategies based on the relationship between addition and subtraction

[Unit 6 Family Letter](#)

[Unit 6 Overview](#)

[Unit 6 Background](#)

Unit 7: Algebra, Patterns, and Coordinate Graphs

Student Outcomes - In Grade 5, children will:

- Simplify an expression using the Order of Operations
- Interpret expressions without simplifying them
- Identify relationships between corresponding terms in two patterns
- Represent points in a coordinate plane

[Unit 7 Family Letter](#)

[Unit 7 Overview](#)

[Unit 7 Background](#)

Unit 8: Measurement and Geometry

Student Outcomes - In Grade 5, children will:

- Understand the concepts of volume
- Use unit cubes to pack a right rectangular prism
- Relate volume to the operations of multiplication and division
- Classify two-dimensional figures in a hierarchy

[Unit 8 Family Letter](#)

[Unit 8 Overview](#)

[Unit 8 Background](#)