Content Strand: Number and Numeration			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Read and write whole numbers and decimals; identify places in such numbers and the values of the digits in those places; use expanded notation, number-and-word notation, exponential notation, and scientific notation to represent whole numbers and decimals.	*Place value and notation*	Understand the Meanings, Uses, and Representations of Numbers
Goal 2	Solve problems involving percents and discounts; explain strategies used; identify the unit whole in situations involving fractions, decimals, and percents.	*Meanings and uses of fractions*	
Goal 3	Use GCFs, LCMs, and divisibility rules to manipulate fractions.	*Number theory*	
Goal 4	Apply the order of operations to numerical expressions to give equivalent names for rational numbers.	*Equivalent names for whole numbers*	Understand Equivalent Names for Numbers
Goal 5	Find equivalent fractions and fractions in simplest form by applying multiplication and division rules and concepts from number theory; convert between fractions, mixed numbers, decimals, and percents.	*Equivalent names for fractions, decimals, and percents*	
Goal 6	Choose and apply strategies for comparing and ordering rational numbers; explain those choices and strategies.	*Comparing and ordering numbers*	Understand Common Numerical Relations

Content Strand: Operations and Computation			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of whole numbers, decimals, and signed numbers; describe the strategies used and explain how they work.	*Addition and subtraction procedures*	Computes Accurately
Goal 2	Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication and division of whole numbers, decimals, and signed numbers; describe the strategies used and explain how they work.	*Multiplication and division procedures*	
Goal 3	Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of fractions and mixed numbers; describe the strategies used and explain how they work.	*Procedures for addition and subtraction of fractions*	
Goal 4	Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication and division of fractions and mixed numbers; describe the strategies used and explain how they work.	*Procedures for multiplication and division of fractions*	
Goal 5	Make reasonable estimates for whole number, decimal, fraction, and mixed number addition, subtraction, multiplication, and division problems; explain how the estimates were obtained.	*Computational estimation*	Make Reasonable Estimates
Goal 6	Use ratios and scaling to model size changes and to solve size-change problems; represent ratios as fractions, percents, and decimals, and using a colon; model and solve problems involving part-to-whole and part-to-part ratios; model rate and ratio number stories with proportions; use and explain cross multiplication and other strategies to solve proportions.	*Models for the operations*	Understand Meanings of Operations

Content Strand: Data and Chance			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Collect and organize data or use given data to create bar, line, circle, and stem-and-leaf graphs with reasonable titles, labels, keys, and intervals.	*Data collection and representation*	Select and Create Appropriate Graphical Representations of Collected or Given Data
Goal 2	Use the minimum, range, median, mode, and mean and graphs to ask and answer questions, draw conclusions, and make predictions; compare and contrast the median and mean of a data set.	*Data analysis*	Analyze and Interpret Data
Goal 3	Use the Multiplication Counting Principle, tree diagrams, and other counting strategies to identify all possible outcomes for a situation; predict results of experiments, test the predictions using manipulatives, and summarize the findings; compare predictions based theoretical probability with experimental results; calculate probabilities and express them as fractions, decimals, and percents; explain how sample size affects results; use the results to predict future events.	*Quantitative probability*	Understand and Apply Basic Concepts of Probability

Content Strand: Measurement and Reference Frames			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Estimate length with and without tools; measure length with tools to the nearest 1/16 inch and millimeter; estimate the measure of angles with and without tools; use tools to draw angles with given measures.	*Length, weight, and angles*	Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements
Goal 2	Choose and use appropriate formulas to calculate the circumference of circles and to solve area, perimeter, and volume problems.	*Area, perimeter, volume, and capacity*	
Goal 3	Use ordered pairs of numbers to name, locate, and plot points in all four quadrants of a coordinate grid.	*Coordinate systems*	Use and Understand Reference Frames

Content Strand: Geometry			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Identify, describe, classify, name and draw angles; determine angle measures by applying properties of orientations of angles and of sums of angle measures in triangles and quadrangles.	*Lines and angles*	Investigate Characteristics and Properties of Two- and Three-Dimensional Geometric Shapes
Goal 2	Identify and describe similar and congruent figures and describe their properties; construct a figure that is congruent to another figure using a compass and straightedge.	*Plane and solid figures*	
Goal 3	Identify, describe, and sketch (including plotting on the coordinate plane) instances of reflections, translations, and rotations.	*Transformations and symmetry*	Apply Transformations and Symmetry in Geometric Situations

Content Strand: Patterns, Functions, and Algebra			
Grade-Level Goals		**Content Thread**	**Program Goal**
Goal 1	Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; represent patterns and rules using algebraic notation; represent functions using words, algebraic notation, tables, and graphs; translate from one representation to another and use representations to solve problems involving functions.	*Patterns and functions*	Understand Patterns and Functions
Goal 2	Determine whether equalities and inequalities are true or false; solve open number sentences and explain the solutions; use a pan-balance model to solve linear equations in one or two unknowns; use trial-and-error and equivalent equation strategies to solve linear equations in one unknown.	*Algebraic notation and solving number sentences*	Use Algebraic Notation to Represent and Analyze Situations and Structures
Goal 3	Describe and apply the conventional order of operations.	*Order of operations*	
Goal 4	Describe and apply properties of arithmetic and multiplicative and additive inverses.	*Properties of the arithmetic operations*	