Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration

Program Goal: Understand the Meanings, Uses, and Representations of Numbers

Content Thread: Rote Counting

PreK	**Goal 1:** Verbally count in sequence to 10 and beyond; develop flexibility in counting, including counting on and counting backward.
K	**Goal 1:** Count on by 1s to 100; count on by 2s, 5s, and 10s and count back by 1s with number grids, number lines, and calculators.
1st	**Goal 1:** Count on by 1s, 2s, 5s, and 10s past 100 and back by 1s from any number less than 100 with and without number grids, number lines, and calculators.
2nd	**Goal 1:** Count on by 1s, 2s, 5s, 10s, 25s, and 100s past 1,000 and back by 1s from any number less than 1,000 with and without number grids, number lines, and calculators.
3rd	
4th	
5th	
6th	

Content Thread: Rational Counting

PreK	**Goal 2:** Count objects with one-to-one correspondence and know the last counting word tells "how many."
K	**Goal 2:** Count 20 or more objects; estimate the number of objects in a collection.
1st	**Goal 2:** Count collections of objects accurately and reliably; estimate the number of objects in a collection.
2nd	
3rd	
4th	
5th	
6th	

Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration

Program Goal: Understand the Meanings, Uses, and Representations of Numbers

Content Thread: Place Value and Notation

PreK	**Goal 3:**	Develop an awareness of numbers and their uses; associate number names, quantities, and written numerals; recognize and use different ways to represent numbers (for example, groups of objects or dots).
K	**Goal 3:**	Model numbers with manipulatives; use manipulatives to exchange 1s for 10s and 10s for 100s; recognize that digits can be used and combined to read and write numbers; read numbers up to 30.
1st	**Goal 3:**	Read, write, and model with manipulatives whole numbers up to 1,000; identify places in such numbers and the values of the digits in those places.
2nd	**Goal 2:**	Read, write, and model with manipulatives whole numbers up to 10,000; identify places in such numbers and the values of the digits in those places; read and write money amounts in dollars-and-cents notation.
3rd	**Goal 1:**	Read and write whole numbers up to 1,000,000; read, write, and model with manipulatives decimals through hundredths; identify places in such numbers and the values of the digits in those places; translate between whole numbers and decimals represented in words, in base-10 notation, and with manipulatives.
4th	**Goal 1:**	Read and write whole numbers up to 1,000,000,000 and decimals through thousandths; identify places in such numbers and the values of the digits in those places between whole numbers and decimals represented in words and in base-10 notation.
5th	**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 to represent whole numbers and decimals.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration

Program Goal: Understand the Meanings, Uses, and Representations of Numbers

Content Thread: Meanings and Uses of Fractions

PreK	
K	**Goal 4:** Use manipulatives to model half of a region or a collection; describe the model.
1st	**Goal 4:** Use manipulatives and drawings to model halves, thirds, and fourths as equal parts of a region or a collection; describe the model.
2nd	**Goal 3:** Use manipulatives and drawings to model fractions as equal parts of a region or a collection; describe the models and name the fractions.
3rd	**Goal 2:** Read, write, and model fractions; solve problems involving fractional parts of a region or a collection; describe strategies used.
4th	**Goal 2:** Read, write, and model fractions; solve problems involving fractional parts of a region or a collection; describe and explain strategies used; given a fractional part of a region or a collection, identify the unit whole.
5th	**Goal 2:** Solve problems involving percents and discounts; describe and explain strategies used; identify the unit whole in situations involving fractions.
6th	**Goal 2:** Solve problems involving percents and discounts; explain strategies used; identify the unit whole in situations involving fractions, decimals, and percents.

Content Thread: Number Theory

PreK	
K	
1st	**Goal 5:** Use manipulatives to identify and model odd and even numbers.
2nd	**Goal 4:** Recognize numbers as odd or even.
3rd	**Goal 3:** Find multiples of 2, 5, and 10.
4th	**Goal 3:** Find multiples of whole numbers less than 10; find whole-number factors of numbers.
5th	**Goal 3:** Identify prime and composite numbers; factor numbers; find prime factorizations.
6th	**Goal 3:** Use GCFs, LCMs, and divisibility rules to manipulate fractions.

Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration

Program Goal: Understand Equivalent Names for Numbers

Content Thread: Equivalent Names for Whole Numbers

PreK		
K	**Goal 5:**	Use manipulatives, drawings, and numerical expressions involving addition and subtraction of 1-digit numbers to give equivalent names for whole numbers up to 20.
1st	**Goal 6:**	Use manipulatives, drawings, tally marks, and numerical expressions involving addition and subtraction of 1- or 2-digit numbers to give equivalent names for whole numbers up to 100.
2nd	**Goal 5:**	Use tally marks, arrays, and numerical expressions involving addition and subtraction to give equivalent names for whole numbers.
3rd	**Goal 4:**	Use numerical expressions involving one or more of the basic four arithmetic operations to give equivalent names for whole numbers.
4th	**Goal 4:**	Use numerical expressions involving one or more of the basic four arithmetic operations and grouping symbols to give equivalent names for whole numbers.
5th	**Goal 4:**	Use numerical expressions involving one or more of the basic four arithmetic operations, grouping symbols, and exponents to give equivalent names for whole numbers; convert between base-10, exponential, and repeated-factor notations.
6th	**Goal 4:**	Apply the order of operations to numerical expressions to give equivalent names for rational numbers.

Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration	
Program Goal: Understand Equivalent Names for Numbers	
Content Thread: Equivalent Names for Fractions, Decimals, and Percents	
PreK	
K	
1st	
2nd	**Goal 6:** Use manipulatives and drawings to model equivalent names for 1/2.
3rd	**Goal 5:** Use manipulatives and drawings to find and represent equivalent names for fractions; use manipulatives to generate equivalent fractions.
4th	**Goal 5:** Use numerical expressions to find and represent equivalent names for fractions and decimals; use and explain a multiplication rule to find equivalent fractions; rename fourths, fifths, tenths, and hundredths as decimals and percents.
5th	**Goal 5:** Use numerical expressions to find and represent equivalent names for fractions decimals, and percents; use and explain multiplication and division rules to find equivalent fractions and fractions in simplest form; convert between fractions and mixed numbers; convert between fractions, decimals, and percents.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Number and Numeration	
Program Goal: Understand Common Numerical Relations	
Content Thread: Comparing and Ordering Numbers	
PreK	**Goal 4:** Compare and order groups of objects using words such as more, fewer, less, same.
K	**Goal 6:** Compare and order whole numbers up to 20.
1st	**Goal 7:** Compare and order whole numbers up to 1,000.
2nd	**Goal 7:** Compare and order whole numbers up to 10,000; use area models to compare fractions.
3rd	**Goal 6:** Compare and order whole numbers up to 1,000,000; use manipulatives to order decimals through hundredths; use area models and benchmark fractions to compare and order fractions.
4th	**Goal 6:** Compare and order whole numbers up to 1,000,000,000 and decimals through thousandths; compare and order integers between -100 and 0; use area models, benchmark fractions, and analyses of numerators and denominators to compare and order fractions.
5th	**Goal 6:** Compare and order whole numbers up to 1,000,000,000 and decimals through thousandths; compare and order integers between -100 and 0; use area models, benchmark fractions, and analyses of numerators and denominators to compare and order fractions.
6th	**Goal 6:** Choose and apply strategies for comparing and ordering rational numbers; explain those choices and strategies.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Compute Accurately

Content Thread: Addition and Subtraction Facts	
PreK	
K	
1st	**Goal 1:** Demonstrate proficiency with +/– 0, +/– 1, doubles, and sum-equals-ten addition and subtraction facts such as 6 + 4 = 10 and 10 – 7 = 3.
2nd	**Goal 1:** Demonstrate automaticity with +/- 0, +/– 1, doubles, and sum-equals-ten facts, and proficiency with all addition and subtraction facts through 10 + 10.
3rd	**Goal 1:** Demonstrate automaticity with all addition and subtraction facts through 10 + 10; use basic facts to compute fact extensions such as 80 + 70.
4th	**Goal 1:** Demonstrate automaticity with basic addition and subtraction facts and fact extensions.
5th	
6th	

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Compute Accurately

Content Thread: Addition and Subtraction Procedures

Grade		
PreK		
K	**Goal 1:**	Use manipulatives, number lines, and mental arithmetic to solve problems involving the addition and subtraction of single-digit whole numbers.
1st	**Goal 2:**	Use manipulatives, number grids, tally marks, mental arithmetic, and calculators to solve problems involving the addition and subtraction of 1-digit whole numbers with 1- or 2-digit whole numbers; calculate and compare the values of combinations and coins.
2nd	**Goal 2:**	Use manipulatives, number grids, tally marks, mental arithmetic, paper & pencil, and calculators to solve problems involving the addition and subtraction of 2-digit whole numbers; describe the strategies used; calculate and compare values of coin and bill combinations.
3rd	**Goal 2:**	Use manipulatives, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of whole numbers and decimals in a money context; describe the strategies used and explain how they work.
4th	**Goal 2:**	Use manipulatives mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the addition and subtraction of whole numbers and decimals through hundredths; describe the strategies used and explain how they work.
5th	**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.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Compute Accurately

Content Thread: Multiplication and Division Facts

PreK	
K	
1st	
2nd	
3rd	**Goal 3:** Demonstrate automaticity with x0, x1, x2, x5, and x10 multiplication facts; use strategies to compute remaining facts up to 10 x 10.
4th	**Goal 3:** Demonstrate automaticity with multiplication facts through 10 * 10 and proficiency with related division facts; use basic facts to compute fact extensions such as 30 * 60.
5th	**Goal 2:** Demonstrate automaticity with multiplication facts and proficiency with division facts and extensions.
6th	

Content Thread: Multiplication and Division Procedures

PreK	
K	
1st	
2nd	
3rd	**Goal 4:** Use arrays, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of 2- and 3-digit whole numbers by 1-digit and describe the strategies used.
4th	**Goal 4:** Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of multidigit whole numbers by 2-digit whole numbers and the division of multidigit whole numbers by 1-digit whole numbers; describe the strategies used and explain how they work.
5th	**Goal 3:** Use mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of whole numbers and decimals and the division of multidigit whole numbers and decimals by whole numbers; express remainders as whole numbers or fractions as appropriate; describe the strategies used and explain how they work.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Compute Accurately

Content Thread: Procedures for Addition and Subtraction of Fractions

PreK	
K	
1st	
2nd	
3rd	
4th	**Goal 5:** Use manipulatives, mental arithmetic, and calculators to solve problems involving the addition and subtraction of fractions with like and unlike denominators; describe the strategies used.
5th	**Goal 4:** 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.
6th	**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.

Content Thread: Procedures for Multiplication and Division of Fractions

PreK	
K	
1st	
2nd	
3rd	
4th	
5th	**Goal 5:** Use area models, mental arithmetic, paper-and-pencil algorithms, and calculators to solve problems involving the multiplication of fractions and mixed numbers; use diagrams, a common-denominator method, and calculators to solve problems involving the division of fractions; describe the strategies used.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Make Reasonable Estimates

Content Thread: Computational Estimation

PreK		
K		
1st	**Goal 3:**	Estimate reasonableness of answers to basic fact problems (e.g., Will 7 + 8 be more or less than 10?).
2nd	**Goal 3:**	Make reasonable estimates for whole number addition and subtraction problems; explain how the estimates were obtained.
3rd	**Goal 5:**	Make reasonable estimates for whole number addition and subtraction problems; explain how the estimates were obtained.
4th	**Goal 6:**	Make reasonable estimates for whole number and decimal addition and subtraction problems and whole number multiplication and division problems; explain how the estimates were obtained.
5th	**Goal 6:**	Make reasonable estimates for whole number and decimal addition, subtraction, multiplication, and division problems and fraction and mixed number addition and subtraction problems; explain how the estimates were obtained.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Understand Meanings of Operations

Content Thread: Models for the Operations

Grade	Goal	Description
PreK	**Goal 1:**	Solve and create number stories using concrete modeling; explore part-whole relationships (for example, 5 is made of 2 and 3).
K	**Goal 2:**	Identify join and take-away situations.
1st	**Goal 4:**	Identify change to more, change-to-less, comparison, and parts-and-total situations.
2nd	**Goal 4:**	Identify and describe change, comparison, and part-and-total situations; use repeated addition, arrays, and skip counting to model multiplication; use equal sharing and equal grouping to model division.
3rd	**Goal 6:**	Recognize and describe change, comparison, and parts-and-total situations; use repeated addition, arrays, and skip counting to model multiplication; use equal sharing and equal grouping to model division.
4th	**Goal 7:**	Use repeated addition, skip counting, arrays, area, and scaling to model multiplication and division.
5th	**Goal 7:**	Use repeated addition, arrays, area, and scaling to model multiplication and division; use ratios expressed as words, fractions, percents, and with colons; solve problems involving ratios of parts of a set to the whole set.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Operations and Computation

Program Goal: Understand Meanings of Operations

Content Thread: Data Collection and Representation

PreK	**Goal 1:** Collect and represent data in a variety of ways focusing on concrete and pictorial representations
K	**Goal 1:** Collect and organize data to create class-constructed tally charts, tables, and bar graphs.
1st	**Goal 1:** Collect and organize data to create tally charts, tables, bar graphs, and line plots.
2nd	**Goal 1:** Collect and organize data or use given data to create tally charts, tables, bar graphs, and line plots.
3rd	**Goal 1:** Collect and organize data or use given data to create charts, tables, bar graphs, and line plots.
4th	**Goal 1:** Collect and organize data or use given data to create charts, tables, bar graphs, line plots, and line graphs.
5th	**Goal 1:** Collect and organize data or use given data to create bar, line, and circle graphs with reasonable titles, labels, keys, and intervals.
6th	**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.

Program Goal: Analyze and Interpret Data

Content Thread: Data Analysis

PreK	**Goal 2:** Use graphs to answer simple questions.
K	**Goal 2:** Use graphs to answer simple questions.
1st	**Goal 2:** Use graphs to answer simple questions and draw conclusions; find the maximum and minimum of a data set.
2nd	**Goal 2:** Use graphs to ask and answer simple questions and draw conclusions; find the maximum, minimum, mode, and median of a data set.
3rd	**Goal 2:** Use graphs to ask simple questions and draw conclusions; find the maximum, minimum, range, mode, and median of a data set.
4th	**Goal 2:** Use the maximum, minimum, range, median, mode, and graphs to ask and answer questions, draw conclusions, and make predictions.
5th	**Goal 2:** Use the maximum, minimum, range, median, mode, and mean and graphs to ask and answer questions, draw conclusions, and make predictions.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Data and Chance	
Program Goal: Understand and Apply Basic Concepts of Probability	
Content Thread: Qualitative Probability	
PreK	
K	**Goal 3:** Describe events using certain, possible, impossible, and other basic probability terms.
1st	**Goal 3:** Describe events using certain, likely, unlikely, impossible and other basic probability terms.
2nd	**Goal 3:** Describe events using certain, likely, unlikely, impossible and other basic probability terms; explain the choice of language.
3rd	**Goal 3:** Describe events using certain, very likely, likely, unlikely, very unlikely, impossible and other basic probability terms; explain the choice of language.
4th	**Goal 3:** Describe events using certain, very likely, likely, unlikely, very unlikely, impossible and other basic probability terms; use more likely, equally likely, same chance, 50-50, less likely, and other basic probability terms to compare events; explain the choice of language.
5th	**Goal 3:** Describe events using certain, very likely, likely, unlikely, very unlikely, impossible and other basic probability terms; use more likely, equally likely, same chance, 50-50, less likely, and other basic probability terms to compare events; explain the choice of language.
6th	

Overview of PreK-6 Grade-Level Goals

Content Strand: Data and Chance

Program Goal: Understand and Apply Basic Concepts of Probability

Content Thread: Quantitative Probability

PreK		
K		
1st		
2nd		
3rd	**Goal 4:**	Predict the outcomes of simple experiments and test the predictions using manipulatives; express the probability of an event by using "_ out of _" language.
4th	**Goal 4:**	Predict the outcomes of experiments and test the predictions using manipulatives; summarize the results and use them to predict future events; express the probability of an event as a fraction.
5th	**Goal 4:**	Predict the outcomes of experiments, test the predictions using manipulatives, and summarize the results; compare predictions based on theoretical probability with experimental results; use summaries and comparisons to predict future events; express the probability of an event as a fraction, decimal, or percent.
6th	**Goal 4:**	Predict the outcomes of experiments, test the predictions using manipulatives, and summarize the results; compare predictions based on theoretical probability with experimental results; use summaries and comparisons to predict future events; express the probability of an event as a fraction, decimal, or percent.

Overview of PreK-6 Grade-Level Goals

Content Strand: Measurement and Reference Frames

Program Goal: Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements

Content Thread: Length, Weight, and Angles

PreK	**Goal 1:**	Distinguish and describe size attributes, including length, weight, and capacity or volume; compare objects according to various size attributes.
K	**Goal 1:**	Use nonstandard tools and techniques to estimate and compare weight and length; identify standard measuring tools.
1st	**Goal 1:**	Use nonstandard tools and techniques to estimate and compare weight and length; measure length with standard measuring tools.
2nd	**Goal 1:**	Estimate length with and without tools; measure length to the nearest inch and centimeter; use standard and nonstandard tools to measure and estimate weight.
3rd	**Goal 1:**	Estimate length with and without tools; measure length to the nearest ½ inch and ½ centimeter; draw and describe angles of records of rotations.
4th	**Goal 1:**	Estimate length with and without tools; measure length to the nearest ¼ inch and ½ centimeter; estimate the size of angles without tools.
5th	**Goal 1:**	Estimate length with and without tools; measure length with tools to the nearest 1/8 inch and millimeter; estimate the measure of angles with and without tools; use tools to draw angles with given measures.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Measurement and Reference Frames

Program Goal: Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements

Content Thread: Area, Perimeter, Volume, and Capacity

PreK	
K	
1st	
2nd	**Goal 2:** Count unit squares to find the area of rectangles.
3rd	**Goal 2:** Describe and use strategies to measure the perimeter of polygons; count unit squares to find the areas of rectangles.
4th	**Goal 2:** Describe and use strategies to measure the perimeter and area of polygons, to estimate the area of irregular shapes, and to find the volume of rectangular prisms.
5th	**Goal 2:** Describe and use strategies to find the perimeter of polygons and the area of circles; choose and use appropriate formulas to calculate the areas of rectangles, parallelograms, and triangles, and the volume of a prism; define pi as the ratio of a circle's circumference to its diameter.
6th	**Goal 2:** Choose and use appropriate formulas to calculate the circumference of circles and to solve area, perimeter, and volume problems.

Content Thread: Units and Systems of Measurement

PreK	**Goal 2:** Become familiar with standard measuring tools and their uses; begin to understand the concept of measurement units and the idea that measurement can be quantified.
K	
1st	
2nd	**Goal 3:** Describe relationships between days in a week and hours in day.
3rd	**Goal 3:** Describe relationships among inches, feet, and yards; describe relationships between minutes in an hour, hours in a day, days in a week.
4th	**Goal 3:** Describe relationships among U.S. customary units of length and among metric units of length.
5th	**Goal 3:** Describe relationships among U.S. customary units of length; among metric units of length; and among U.S. customary units of capacity.
6th	

Overview of PreK-6 Grade-Level Goals

Content Strand: Measurement and Reference Frames

Program Goal: Understand the Systems and Processes of Measurement; Use Appropriate Techniques, Tools, Units, and Formulas in Making Measurements

Content Thread: Money

PreK	
K	**Goal 2:** Identify pennies, nickels, dimes, quarters, and dollar bills.
1st	**Goal 2:** Know and compare the value of pennies, nickels, dimes, quarters, and dollar bills; make exchanges between coins.
2nd	**Goal 4:** Make exchanges between coins and bills.
3rd	
4th	
5th	
6th	

Program Goal: Use and Understand Reference Frames

Content Thread: Temperature

PreK	
K	**Goal 3:** Describe temperature using appropriate vocabulary, such as hot, warm, and cold; identify a thermometer as a tool for measuring temperature.
1st	**Goal 3:** Identify a thermometer as a tool for measuring temperature; read temperatures on Fahrenheit and Celsius thermometers to the nearest 10°.
2nd	**Goal 5:** Read temperature on both the Fahrenheit and Celsius scales.
3rd	
4th	
5th	
6th	

Overview of PreK-6 Grade-Level Goals

Content Strand: Measurement and Reference Frames

Program Goal: Use and Understand Reference Frames

Content Thread: Time

PreK	**Goal 3:** Sequence familiar events in time.
K	**Goal 4:** Describe and use measures of time periods relative to a day and week; identify tools that measure time.
1st	**Goal 4:** Use a calendar to identify days, weeks, months, and dates; tell and show time to the nearest half and quarter hour on an analog clock.
2nd	**Goal 6:** Tell and show time to the nearest five minutes on an analog clock; tell and write time in digital notation.
3rd	**Goal 4:** Tell and show time to the nearest minute on an analog clock; tell and write time in digital notation.
4th	
5th	
6th	

Content Thread: Coordinate Systems

PreK	
K	
1st	
2nd	
3rd	
4th	**Goal 4:** Use ordered pairs of numbers to name, locate, and plot points in the first quadrant of a coordinate grid.
5th	**Goal 4:** Use ordered pairs of numbers to name, locate, and plot points in all four quadrants of a coordinate grid.
6th	**Goal 3:** Use ordered pairs of numbers to name, locate, and plot points in all four quadrants of a coordinate grid.

Overview of PreK-6 Grade-Level Goals

Content Strand: Measurement and Reference Frames	
Program Goal: Investigate Characteristics and Properties of Two- and Three-Dimensional Geometric Shapes	
Content Thread: Lines and Angles	
PreK	
K	
1st	
2nd	**Goal 1:** Draw line segments and identify parallel line segments.
3rd	**Goal 1:** Identify and draw points, intersecting and parallel line segments, and lines, rays, and right angles.
4th	**Goal 1:** Identify, draw, and describe points, intersecting and parallel line segments and lines, rays, and right, acute, and obtuse angles.
5th	**Goal 1:** Identify, describe, compare, name, and draw right, acute, obtuse, straight, and reflex angles; determine angle measures in vertical and supplementary angles and by applying properties of sums of angle measures in triangles and quadrangles.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Geometry

Program Goal: Investigate Characteristics and Properties of Two- and Three-Dimensional Geometric Shapes

Content Thread: Plane and Solid Figures

PreK	**Goal 1:**	Recognize and describe basic 2-dimensional geometric shapes; explore the relationships between basic 2-dimensional and 3-dimensional shapes.
K	**Goal 1:**	Identify and describe plane and solid figures including circles, triangles, squares, rectangles, spheres, and cubes.
1st	**Goal 1:**	Identify and describe plan and solid figures including circles, triangles, squares, rectangles, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes.
2nd	**Goal 2:**	Identify, describe, and model plane and solid figures including circles, triangles, squares, rectangles, hexagons, trapezoids, rhombuses, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes.
3rd	**Goal 2:**	Identify, describe, model, and compare plane and solid figures including circles, polygons, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes using appropriate geometric terms including the terms face, edge, vertex, and base.
4th	**Goal 2:**	Describe, compare, and classify plane and solid figures, including polygons, circles, spheres, cylinders, rectangular prisms, cones, cubes, and pyramids, using appropriate geometric terms including vertex, base, face, edge, and congruent.
5th	**Goal 2:**	Describe, compare, and classify plane and solid figures using appropriate geometric terms; identify congruent figures and describe their properties.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Geometry

Program Goal: Apply Transformations and Symmetry in Geometric Situations

	Content Thread: Transformations and Symmetry
PreK	**Goal 2:** Recognize and describe the position and location of objects; use spatial reasoning in concrete tasks, such as putting together puzzles and creating collages and block structures.
K	**Goal 2:** Identify shapes having line symmetry.
1st	**Goal 2:** Identify shapes having lines symmetry; complete line-symmetric shapes or designs.
2nd	**Goal 3:** Create and complete two-dimensional symmetrical shapes or designs.
3rd	**Goal 3:** Create and complete two-dimensional symmetric shapes or designs; locate multiple lines of symmetry in a two-dimensional shape.
4th	**Goal 3:** Identify, describe, and sketch examples of reflections; identify and describe examples of translations and rotations.
5th	**Goal 3:** Identify, describe, and sketch examples of reflections, translations, and rotations.
6th	**Goal 3:** Identify, describe, and sketch (including plotting on the coordinate plane) instances of reflections, translations, and rotations.

Overview of PreK-6 Grade-Level Goals

Content Strand: Patterns, Functions, and Algebra

Program Goal: Understand Patterns and Functions

Content Thread: Patterns and Functions

PreK	**Goal 1:**	Recognize and match attributes of objects, such as size, shape, and color; use rules to sort objects; use rules to create and extend repeating patterns.
K	**Goal 1:**	Extend, describe, and create visual, rhythmic, and movement patterns; use rules, which will lead to functions, to sort, make patterns, and play "What's My Rule?" and other games.
1st	**Goal 1:**	Extend, describe, and create numeric, visual, and concrete patterns; solve problems involving function machines, "What's My Rule?" tables, and Frames-and-Arrows diagrams.
2nd	**Goal 1:**	Extend, describe, and create numeric, visual, and concrete patterns; describe rules for patterns and use them to solve problems; use words and symbols to describe and write rules for functions involving addition and subtraction and use those rules to solve problems.
3rd	**Goal 1:**	Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; use words and symbols to describe and write rules for functions involving addition, subtraction, and multiplication and use those rules to solve problems.
4th	**Goal 1:**	Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; use words and symbols to describe and write rules for functions that involve the four basic arithmetic operations and use those rules to solve problems.
5th	**Goal 1:**	Extend, describe, and create numeric patterns; describe rules for patterns and use them to solve problems; write rules for functions involving the four basic arithmetic operations; represent functions using words, symbols, tables, and graphs and use those representations to solve problems.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Patterns, Functions, and Algebra	
Program Goal: Use Algebraic Notation to Represent and Analyze Situations and Structures	
Content Thread: Algebraic Notation and Solving Number Sentences	
PreK	
K	**Goal 2:** Read and write expressions and number sentences using the symbols +, -, and =.
1st	**Goal 2:** Read, write, and explain expressions and number sentences using the symbols +, − , and = and the symbols > and < with cues; solve equations involving addition and subtraction.
2nd	**Goal 2:** Read, write, and explain expressions and number sentences using the +, −, = >, and <; solve number sentences involving addition and subtraction; write expressions and number sentences to model number stories.
3rd	**Goal 2:** Read, write, and explain number sentences using the symbols +, − , x, ÷, =, >, and <; solve number sentences, write expressions and number sentences to model number stories.
4th	**Goal 2:** Use conventional notation to write expressions and number sentences using the four basic arithmetic operations; determine whether number sentences are true or false; solve open sentences and explain the solutions; write expressions and number sentences to model number stories.
5th	**Goal 2:** Determine whether number sentences are true or false; solve open number sentences and explain the solutions; use a letter variable to write an open sentence to model a number story; use a pan-balance model to solve linear equations with one unknown.
6th	**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.

Overview of PreK-6 Grade-Level Goals

Content Strand: Patterns, Functions, and Algebra

Program Goal: Use Algebraic Notation to Represent and Analyze Situations and Structures

Content Thread: Order of Operations

Grade	Goal	Description
PreK		
K		
1st		
2nd		
3rd	**Goal 3:**	Recognize that numeric expressions can have different values depending on the order in which operations are carried out; understand that grouping symbols can be used to affect the order in which operations are carried out.
4th	**Goal 3:**	Evaluate numeric expressions containing grouping symbols; insert grouping symbols to make number sentences true.
5th	**Goal 3:**	Evaluate numeric expressions containing grouping symbols and nested grouping symbols; insert grouping symbols and nested grouping symbols to make number sentences true; describe and use the precedence of multiplication and division over addition and subtraction.
6th	**Goal 3:**	Describe and apply the conventional order of operations.

Content Thread: Properties of the Arithmetic Operations

Grade	Goal	Description
PreK		
K		
1st	**Goal 3:**	Apply the Commutative Property of Addition and the Additive Identity to basic addition fact problems.
2nd	**Goal 3:**	Describe the Commutative and Associative Properties of Addition and apply them to mental arithmetic problems.
3rd	**Goal 4:**	Describe and apply the Commutative and Associative Properties of Addition, the Commutative Property of Multiplication, and the Multiplicative Identity.
4th	**Goal 4:**	Apply the Distributive Property of Multiplication over Addition to the partial-products multiplication algorithm.
5th	**Goal 4:**	Describe and apply properties of arithmetic.
6th	**Goal 4:**	Describe and apply properties of arithmetic and multiplicative and additive inverses.