

Grade 2 Everyday Mathematics

Grade Level Goals

❖ Number and Numeration

Understand the meanings, uses, and representations of numbers.

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.

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.

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.

GOAL 4: Recognize numbers as odd or even.

Understand equivalent names for numbers.

GOAL 5: Use tally marks, arrays, and numerical expressions involving addition and subtraction to give equivalent names for whole numbers.

GOAL 6: Use manipulatives and drawings to model equivalent names for $\frac{1}{2}$.

Understand common numerical relations.

GOAL 7: Compare and order whole numbers up to 10,000; use area models to compare fractions.

❖ Operations and Computations

Compute accurately.

GOAL 1: Demonstrate automaticity with ± 0 , ± 1 , doubles, and sum-equals-ten facts, and proficiency with all addition and subtraction facts through $10 + 10$.

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.

Make reasonable estimates.

GOAL 3: Make reasonable estimates for whole number addition and subtraction problems; explain how the estimates were obtained.

Understand meaning of operations.

GOAL 4: Identify 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.

❖ **Data and Chance**

Select and create appropriate graphical representations of collected or given data.

GOAL 1: Collect and organize data or use given data to create tally charts, tables, bar graphs, and line plots.

Analyze and interpret data.

GOAL 2: Use graphs to ask and answer simple questions and draw conclusions; find the maximum, minimum, mode, and median of a data set.

Understand and apply basic concepts of probability.

GOAL 3: Describe events using *certain*, *likely*, *unlikely*, *impossible* and other basic probability terms; explain the choice of language.

❖ **Measurement and Reference Frames**

Understand the systems and processes of measurement; use appropriate techniques, tools, units, and formulas in making measurements.

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.

GOAL 2: Count unit squares to find the area of rectangles.

GOAL 3: Describe relationships between days in a week and hours in a day.

GOAL 4: Make exchanges between coins and bills.

Use and understand reference frames.

GOAL 5: Read temperature on both the Fahrenheit and Celsius scales.

GOAL 6: Tell and show time to the nearest five minutes on an analog clock; tell and write time in digital notation.

❖ **Geometry**

Investigate characteristics and properties of 2- and 3-dimensional geometric shapes.

GOAL 1: Draw line segments and identify parallel line segments.

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.

Apply transformations and symmetry in geometric situations.

GOAL 3: Create and complete 2-dimensional symmetric shapes or designs.

❖ **Patterns, Functions, and Algebra**

Understand patterns and functions.

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.

Use algebraic notation to represent and analyze situations and structures.

GOAL 2: Read, write, and explain expressions and number sentences using the symbols $+$, $-$, and \div and the symbols $>$ and $<$. Solve number sentences involving addition and subtraction; write expressions and number sentences to model number stories.

GOAL 3: Describe the Commutative and Associative Properties of Addition and apply them to mental arithmetic problems.