FCPS FAIRFAX COUNTY PUBLIC SCHOOLS

Instructional Services

Grade 4 Mathematics
A Year at a Glance

Numerical Relationships	Operations	Measurement	Geometry	Data Analysis, Statistics, and Probability	Patterns, Functions, and Algebra
Whole Numbers: ★ Identify the place value of each digit in whole numbers through one million ★ Read, write, and compare whole numbers ★ Round whole numbers to the nearest thousand, ten thousand, and hundred thousand ★ *Represent whole numbers on a number line* **Fractions and Decimals:** ★ Compare and order fractions and mixed numbers having denominators of 12 or less ★ Represent equivalent fractions and decimal/fraction equivalents ★ Read, write, compare, and order decimals through thousandths ★ Round decimals to the nearest whole number, tenth, and hundredth ★ *Represent decimals on a number line*	**Estimation:** ★ Estimate whole number sums, differences, products, and quotients ★ Refine estimates by adjusting the final amount ★ *Estimate sums and differences of fractions* **Procedures for Computation:** ★ Add, subtract, multiply, and divide whole numbers ★ *Interpret the remainder in problem solving settings* ★ Add and subtract fractions using common multiples and factors ★ Add and subtract decimals ★ Solve single-step and multistep problems involving addition, subtraction, multiplication, and *division* of whole numbers and addition and subtraction of fractions and decimals	**Customary and Metric Units:** ★ Estimate and measure weight/mass (ounces, pounds, tons, grams, kilograms) ★ Estimate and measure length to the nearest eighth inch and to the nearest millimeter ★ Estimate and measure liquid volume (cups, pints, quarts, gallons) ★ Identify equivalent measurements between units within the US Customary system ★ Identify equivalent measurements between units within the metric system ★ Determine elapsed time in hours and minutes within a 12-hour period	**Identify, Classify, and Transform Shapes:** ★ Identify and describe points, lines, line segments, rays, and angles including endpoints and vertices ★ Identify situations that represent parallel, perpendicular, and intersecting lines ★ Recognize the congruence of plane figures resulting from transformations ★ Identify and describe the properties of polygons with 10 or fewer sides ★ *Identify figures as open or closed, polygons or nonpolygons*	**Collect, Organize, Analyze Data:** ★ Collect, organize, display, and interpret data on bar graphs, line graphs, and *line plots* **Probability:** ★ Model and determine all possible outcomes of a simple event with no more than 24 possible outcomes ★ Predict the likelihood of an event occurring and write the probability as a fraction	**Patterns:** ★ Describe, create, and extend geometric and numerical patterns **Functions:** ★ Write equations to demonstrate equivalent mathematical relationships ★ Investigate and describe the associative properties for addition and multiplication

Italicized items provide connections.