Scope and Sequence: Fourth Grade

What Students Learn in Fourth Grade Mathematics
In fourth grade, students will begin the year with a focus on place value, extending their work in the base-ten number system to numbers to 1,000,000. Students will focus on fluently adding and subtracting whole numbers with a standard algorithm and understanding the relationship of place value to multiplication/division by 10. Then students will explore the concept of multiplication in comparison to additive growth, solve multiple comparison problems, understand factors, multiples, and prime and composite numbers. During the second trimester, area models and generic rectangles will be used to multiply whole numbers. Students will solve words problems involving distance, time, or money and convert units of measurement. A connection between multiplication and division will be made as students divide up to 4-digit numbers by a single-digit divisor, and explore the concept of remainders. Fractions and decimal fractions are also major standards for fourth grade. Students will define fractions, find equivalent fractions, and compare fractions and decimal fractions. Students will then build the concept of the "whole" with fractions and decimal fractions (tenths and hundredths). They will also interpret line plots with fractional amounts. In addition, students will be adding and subtracting fractions with like denominators, decomposing fractions, and multiplying fractions by a whole number. The year will end focusing on the additional support standards in geometry with angles and polygons. Students will understand the concept of angles, benchmark angles, and angle measure as the fraction of a circle comprising 360°. They will measure angles with protractors, sketch angles, identify and name angles, and find missing measurements. Students will classify polygons by angles and identify and draw lines of symmetry in polygons.

Unit Numbers and Titles		Grade 4 Students…
Tri 1	Place Value and Fluency with Addition and Subtraction	**Should master:** • Fluently adding and subtracting multi-digit whole numbers • Equivalent fractions • Comparing fractions **Work towards fluency in:** • Place value (role of 10) of whole numbers • Multiplication of 2-digit factors • Division by single digit divisors of whole numbers • Measuring and sketching angles • Comparing decimals to the hundredths place • Addition and subtraction of fractions with like denominators, including mixed numbers • Multiplication of fractions by whole numbers **Are introduced to:** • Adding decimal fractions with denominators of 10 and 100 • Unit conversions within a system • Solving for missing angle measures • Classifying Polygons • Factors, prime and composite numbers
	Multiplication Concepts	
Tri 2	Multiplication of Whole Numbers and its Application	
	Whole Number Division	
Tri 3	Fractions and Decimal Fractions	
	Fraction Addition, Subtraction and Multiplication	
	Angles and Polygons	