4th Grade Math Topics – What Do They Mean?

Topic	What does that mean? Students will:
Place Value Through the Thousands	• Generalize their understanding of place value to one million, understanding the relative sizes of numbers in each place • Round whole numbers to any place
Fluently Add & Subtract to One Million	• Fluently add and subtract whole numbers using the standard algorithm and explain the reasonableness of their answer
Problem Solving using Multiplication	• Interpret and represent multiplication equations as comparisons • Multiply to solve word problems using equations and drawings
Multiply by 1-Digit & 2-Digit Numbers	• Explain and illustrate solutions using strategies based on place value, properties of operations, equations, and/or models • Multiply up to 4-digit numbers by a one-digit whole number & multiply two 2-digit whole numbers
Factors & Multiples	• Decide whether a whole number is prime or composite (0-100) • List the multiples and factors of a given number (1-100)
Problem Solving using Division	• Students divide to solve word problems involving comparison using equations and drawings • Students solve word problems with remainders and use mental math & estimation to explain their answers
Divide by 1-Digit Numbers	• Find whole number quotients and remainders (up to 4-digit by 1-digit)
Using Equations to Solve Problems	• Solve multi-step word problems with whole numbers & having whole number answers using addition, subtraction, multiplication & division • Division with remainders – represent these problems using equations
Line Symmetry	• Draw all possible lines of symmetry in 2D figures • Draw points, lines, line segments, rays, angles, perpendicular & parallel lines
Polygons	• Classify shapes based on parallel or perpendicular lines, angles, and identify right triangles
Angles	• Solve addition and subtraction problems to find unknown angles and determine the measure of an angle in degrees using a protractor.
Relative Sizes of Measurement Units	• Use the four operations to solve word problems involving distance, time, & volume • Use benchmarks to understand relative sizes (a car is approximately one ton)
Represent & Interpret Data	• Solve addition and subtraction of fraction problems using a line plot & make line plots in fractions (1/2, ¼ & 1/8)
Perimeter	• Use a formula to find the perimeter of a rectangle – apply in the real world and in word problems
Area	Use a formula to find the area of a rectangle – apply in the real world and in word problems
Fraction Equivalence & Comparison	• Compare two fractions with different numerators & denominators using <, >, =, ≠
Adding & Subtracting Fractions with Like Denominators	• Add and subtract mixed numbers with like denominators and solve word problems involving fractions
Multiply Fractions by Whole Numbers	• Solve word problems by multiplying a fraction by a whole number
Relate Fractions, Decimals & Money	• Use +, -, × , ÷ to solve word problems involving money, including problems that involve simple fractions or decimals