**4th Grade Math Topics**

**Unit 1: Place Value, Addition and Subtraction with Greater Numbers**

**Essential Vocabulary:**

**p***lace value drawing, digit, standard form, word form, expanded form*

*greater than >, less than <, groups, sum, digit, difference, subtrahend*

*addend, inverse operation, group, ungroup, opposite, reverse, undoing, break-apart drawing, unknown addend, expression, equation*

**Unit 2: Multiplication with Whole Numbers**

**Essential Vocabulary:**

*array, area, area model, square unit, factor, product, horizontal (row), vertical (column), Place Value Sections Method, Expanded Notation Method, Commutative Property, Associative Property, Lattice Method*

*estimate, rounding, Distributive Property, Partial products, Algebraic Notation Method, Shortcut Method, overestimate, underestimate*

**Unit 3: Division with Whole Numbers**

**Essential Vocabulary:**

*divisor, quotient, dividend, remainder, Situation equation, Solution equation*

**Unit 4: Equations and Word Problems**

**Essential Vocabulary:**

*expression, equation, simplify an expression, term, evaluate an expression, algebra (algebraic notation), Variable, Identity Property, Order of operation, sum, difference,  factor pair, inequality, inverse operation, situation equation, solution equation, break-apart drawing, compare, comparison bars (“times as much” or “times as many”) Pictograph, bar graph, x-axis & y-axis, Prime number, composite number, Multiple, Factor pair, whole number, Venn Diagram, Pattern, term, function, sequence*

**Unit 5: Measurement**

**Essential Vocabulary:**

*Metric System, meter, gram, liter, mass, milli, centi, deci, kilo, liquid volume,*

*line plot, elapsed time, second, minute, hour, AM, PM, analog, digital)*

*inch, foot, yard, mile, pound, ounce, ton, cup, fluid ounce, quart, pint*

*gallon, perimeter, length, width, formula, area, (square unit)*

**Unit 6: Fraction Concepts and Operations**

**Essential Vocabulary:**

*unit fraction, fraction, numerator, denominator, fraction partner, fraction chain, like/common denominator, mixed number*

**Unit 7: Fractions and Decimals**

**Essential Vocabulary:**

*equivalent fractions, simplify a fraction(reduce); add, common denominator, (Least Common Denominator /LCD, Least Common Multiple /LCM), decimal, decimal number, decimal point, placeholder, decimal notation), tenths, hundredths*

**Unit 8: Geometry**

**Essential Vocabulary:**

*point, line, line segment, endpoint, angle, ray, vertex of a polygon, vertex of an angle, right, acute, obtuse, straight angles, degree, right angle, straight angle, protractor, circle, reflex angle, triangle, right, obtuse, acute, equilateral, isosceles, & scalene triangles, congruent, adjacent sides, compose, decompose (complementary, supplementary, vertical angles), parallel, perpendicular(intersecting, oblique), quadrilateral, adjacent, opposite sides, trapezoid, parallelogram, rhombus, rectangle, square, diagonal of a quadrilateral, vertex of a polygon, congruent, polygon, regular polygon, (decagon, hexagon, heptagon, octagon, pentagon, nonagon), line symmetry, line of symmetry, mirror image, reflection*