| **Concepts** | **Competencies** | **Grade Level Vocabulary** |
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| **Place Value**  **Properties of Operations** | Demonstrate an understanding of multi-digit whole numbers  Compare and round multi-digit numbers  Perform multi-digit arithmetic  (CC.2.1.4.B.1 & CC.2.1.4.B.2) | **Use the four operations with whole numbers to solve problems.**  multiplication/multiply, division/divide, dividend, divisor, addition/add, subtraction/subtract, equations, unknown, remainders, reasonableness, mental computation, estimation, rounding  **Gain familiarity with factors and multiples.**  multiplication/multiply, division/divide, factor pairs, factor, multiple, prime, composite  **Generate and analyze patterns.**  pattern (number or shape), pattern rule  **Generalize place value understanding for multi-digit whole numbers.**  place value, greater than, less than, equal to, ‹, ›, =, comparisons/compare, round, inequality, expression  **Use place Value understanding and properties of operations to perform multi-digit arithmetic.**  add, addend, sum, subtract, difference, equation, strategies, (properties)-rules about how numbers work, rectangular arrays, area model, multiply, divide, factor, product, quotient, reasonableness  **Extend understanding of fraction equivalence and ordering.**  partition(ed), fraction, unit fraction, equivalent, expression, multiple, reason, denominator, numerator, comparison/compare, ‹, ›, =, benchmark fraction  **Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.**  operations, addition/joining, subtraction/separating, fraction, unit fraction, equivalent, multiple, reason, denominator, numerator, decomposing, mixed number,(properties)-rules about how numbers work, multiply, multiple  **Understand decimal notation for fractions, and compare decimal fractions.** fraction, numerator, denominator, equivalent, reasoning, decimals, tenths, hundreds, multiplication, comparisons/compare, ‹, ›, =,  **Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.**  measure, metric, customary, convert/conversion, relative size, liquid volume, mass, length, distance, kilometer (km), meter (m), centimeter (cm), kilogram (kg), gram (g), liter (L), milliliter (mL), inch (in), foot (ft), yard (yd), mile (mi), ounce (oz), pound (lb), cup (c), pint (pt), quart (qt), gallon (gal), time, a.m., p.m., clockwise, counter clockwise, hour, minute, second, equivalent, operations, add, subtract, multiply, divide, fractions, decimals, area, perimeter  **Represent and interpret data.**  data, line plot, length, fractions,  **Geometric measurement: understand concepts of angle and measure angles.**  measure, point, end point, geometric shapes, ray, angle, circle, fraction, intersect, one-degree angle, protractor, decomposed, addition, subtraction, unknown, obtuse, acute  **Draw and identify lines and angles, and classify shapes by properties of their lines and angles.**  classify shapes/figures, properties (attributes, features)**,** defining characteristics and non-defining characteristic, point, line, line segment, ray, angle, vertex/vertices, right angle, acute, obtuse, perpendicular, parallel, right triangle, isosceles triangle, equilateral triangle, scalene triangle, line of symmetry, symmetric figures, two dimensional, regular and irregular  From previous grades: polygon, rhombus/rhombi, rectangle, square, triangle, quadrilateral, pentagon, hexagon, cube, trapezoid, half/quarter circle, circle, cone, cylinder, sphere |
| **Fractions**  **Decimals** | Demonstrate an understanding of fraction equivalence  Compare and order fractions  Solve problems involving fractions and mixed numbers  Use decimal notation for decimal fractions  Compare decimal fractions  Compare decimals  (CC.2.1.4.C.1, CC.2.1.4.C.2 & CC.2.1.4.C.3) |
| **Represent and Solve Problems**  **Number Theory**  **Patterns** | Represent and solve problems verbally as equations  Use factors to represent numbers in various ways  Recognize that a whole number is a multiple of each of its factors  Generate and analyze patterns that follow a single rule  (CC.2.2.4.A.1, CC.2.2.4.A.2 & CC.2.2.4.A.4) |
| **Geometric Shapes and Figures** | Draw and identify lines and angles  Classify shapes by properties of their lines and angles  Recognize symmetric shapes and draw lines of symmetry  (CC.2.3.4.A.1, CC.2.3.4.A.2 & CC.2.3.4.A.3) |
| **Measurement**  **Data Displays** | Solve problems involving measurements  Convert larger unit to smaller unit  Translate one type of data display to another  Represent and interpret data involving fractions  Measure and draw angles  Apply area and perimeter formulas  (CC.2.4.4.A.1, CC.2.4.4.A.2, CC.2.4.4.A.4 & CC.2.4.4.A.6) |