| **Concepts** | **Competencies** | **Grade Level Vocabulary** |
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| Place Value  Properties of Operations | Perform multi-digit arithmetic  Demonstrate fluency of addition and subtraction  Round whole numbers to the nearest ten or hundred  (CC.2.1.3.B.1) | **Represent and solve problems involving multiplication and division.**  operations, multiplication, division, factor, product, quotient, partitioned equally, equal shares, number of groups, number in the groups, array, equation, unknown, expression  **Understand properties of multiplication and the relationship between multiplication and division.**  operation, multiply, divide, factor, product, quotient, dividend, divisor, strategies, unknown, (properties)-rules about how numbers work  **Multiply and divide within 100.**  operation, multiply, divide, factor, product, quotient, unknown, strategies, reasonableness, mental computation, property  **Solve problems involving the four operations, and identify and explain patterns in arithmetic.**  operation, multiply, divide, factor, product, quotient, subtract, add, addend, sum, difference, equation, expression, unknown, strategies, reasonableness, mental computation, estimation, rounding, patterns, (properties)-rules about how numbers work, input and output table  **Use place value understanding and properties of operations to perform multi-digit arithmetic.**  place value, round, addition, add, addend, sum, subtraction, subtract, difference, strategies, (properties)-rules about how numbers work  **Develop understanding of fractions as numbers.**  partition(ed), equal parts, fraction, equal distance ( intervals), equivalent, equivalence, reasonable, denominator, numerator, comparison, compare, ‹, ›, = , justify, inequality  **Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.**  estimate, time, time intervals, a.m, p.m, digital clock, analog clock, minute, hour, elapsed time, measure, liquid volume, mass, standard units, metric, gram (g), kilogram (kg), liter (L), milliliter (mL)  **Represent and interpret data.**  scale, scaled picture graph, scaled bar graph, line plot,data  **Geometric measurement: understand concepts**  **of area and relate area to multiplication and to addition.**  attribute, area, square unit, plane figure, gap, overlap, square cm, square m , square in., square ft, nonstandard units, tiling, side length, decomposing  **Geometric measurement: recognize perimeter**  **as an attribute of plane figures and distinguish between linear and area measures.**  attribute, perimeter, plane figure, linear, area, polygon, side length  **Reason with shapes and their attributes.**  attributes, properties, quadrilateral, open figure, closed figure , three-sided, 2-dimensional, 3-dimensional, rhombi, rectangles, and squares are subcategories of quadrilaterals, cubes, cones, cylinders, and rectangular prisms are subcategories of 3-dimensional figures shapes: polygon, rhombus/rhombi, rectangle, square, partition, unit fraction, kite, parallelogram example and non-example  From previous grades: triangle, quadrilateral, pentagon, hexagon, cube, trapezoid, half/quarter circle, circle, cone, cylinder, sphere, sides, vertices, corners |
| Fractions | Develop an understanding of fractions as numbers  Represent fractions on a number line  Represent and generate equivalent fractions  Compare fractions with the same numerator or same denominator  (CC.2.1.3.C.1) |
| Multiplication  Division  Patterns | Represent and solve problems  Demonstrate an understanding of properties of multiplication  Demonstrate an understanding of the relationship between multiplication and division  Demonstrate fluency  Identify and explain patterns in arithmetic (including addition and subtraction)  (CC.2.2.3.A.1,CC.2.2.3.A.2, CC.2.2.3.A.3 & CC.2.2.3.A.4) |
| Two- and Three-dimensional Figures  Fractions  Area | Identify and classify shapes and their attributes  Compare shapes  Partition two-dimensional shapes into equal parts  Express the area of a partition as a unit fraction of the whole  (CC.2.3.3.A.1 & CC.2.3.3.A.2) |
| Measurement  Data Displays  Time  Money (Coins and Bills) | Solve problems  Make estimations  Tell and write time to nearest minute  Calculate time intervals  Make change using combination of coins and bills  Represent and interpret data using various displays  Determine the area of a rectangle as it relates to multiplication and addition  Determine perimeter or side lengths of various polygons  Distinguish between linear and area measurements  (CC.2.4.3.A.1, CC.2.4.3.A.2, CC.2.4.3.A.3, CC.2.4.3.A.4, CC.2.4.3.A.5 & CC.2.4.3.A.6) |