| Concepts | Competencies | Grade Level Vocabulary |
| :---: | :---: | :---: |
| Place Value Properties of Operations | Perform multi-digit arithmetic <br> Demonstrate fluency of addition and subtraction <br> Round whole numbers to the nearest ten or hundred <br> (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 |
| Fractions | Develop an understanding of fractions as numbers <br> Represent fractions on a number line <br> Represent and generate equivalent fractions <br> Compare fractions with the same numerator or same denominator <br> (CC.2.1.3.C.1) | in the groups, array, equation, unknown, expression <br> Understand properties of multiplication and the relationship between multiplication and division. operation, multiply, divide, factor, product, quotient, dividend, divisor, strategies, unknown, (properties)-rules |
| Multiplication Division Patterns | Represent and solve problems <br> Demonstrate an understanding of properties of multiplication <br> Demonstrate an understanding of the relationship between multiplication and division <br> Demonstrate fluency <br> 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) | about how numbers work Multiply and divide within 100. <br> 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, |
| Two- and Threedimensional Figures <br> Fractions <br> Area | Identify and classify shapes and their attributes <br> Compare shapes <br> Partition two-dimensional shapes into equal parts | difference, equation, expression, unknown, strategies, reasonableness, mental computation, estimation, rounding, patterns, (properties)-rules about how numbers work, |

Grade 3 - Mathematics

| Concepts | Competencies | Grade Level Vocabulary |
| :---: | :---: | :---: |
|  | Express the area of a partition as a unit fraction of the whole <br> (CC.2.3.3.A. 1 \& CC.2.3.3.A.2) | input and output table <br> Use place value understanding and properties of operations |
| Measurement <br> Data Displays <br> Time <br> Money (Coins and Bills) | Solve problems <br> Make estimations <br> Tell and write time to nearest minute <br> Calculate time intervals <br> Make change using combination of coins and bills <br> Represent and interpret data using various displays <br> Determine the area of a rectangle as it relates to multiplication and addition <br> Determine perimeter or side lengths of various polygons <br> Distinguish between linear and area measurements <br> (CC.2.4.3.A.1, CC.2.4.3.A.2, CC.2.4.3.A.3, <br> CC.2.4.3.A.4, CC.2.4.3.A. 5 \& CC.2.4.3.A.6) | to perform multi-digit arithmetic. <br> place value, round, addition, add, addend, sum, subtraction, subtract, difference, strategies, (properties)-rules about how numbers work <br> 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. <br> scale, scaled picture graph, scaled bar graph, line plot, data <br> Geometric measurement: understand concepts of area and relate area to |

Grade 3 - Mathematics

| Concepts | Competencies | Grade Level <br> Vocabulary |
| :--- | :--- | :--- |
|  |  | multiplication and to <br> addition. <br> attribute, area, square unit, <br> plane figure, gap, overlap, <br> square cm, square m, <br> square in., square ft, <br> nonstandard units, tiling, <br> side length, decomposing <br> Geometric measurement: <br> recognize perimeter <br> as an attribute of plane <br> figures and distinguish <br> between linear and area <br> measures. <br> attribute, perimeter, plane <br> figure, linear, area, polygon, <br> side length |
|  | Reason with shapes and <br> their attributes. <br> attributes, properties, <br> quadrilateral, open figure, <br> closed figure, three-sided, <br> 2-dimensional, 3- <br> dimensional, rhombi, <br> rectangles, and squares are <br> subcategories of <br> quadrilaterals, cubes, cones, <br> cylinders, and rectangular <br> prisms are subcategories of <br> 3-dimensional figures <br> shapes polygon, <br> rhombus/rhombi, rectangle, <br> square, partition, unit <br> fraction, kite, parallelogram <br> example and non-example <br> From previous grades: <br> triangle, quadrilateral, <br> pentagon, hexagon, cube, <br> trapezoid, half/quarter <br> circle, circle, cone, cylinder, <br> sphere, sides, vertices, <br> corners |  |

