| **Concepts** | **Competencies** | **Grade Level Vocabulary** |
| --- | --- | --- |
| **Place Value**  **Properties of Operations**  **Decimals** | Demonstrate an understanding of rounding as it pertains to whole numbers and decimals  Read, write and compare decimals  Use whole numbers and decimals to compute accurately  (CC.2.1.5.B.1 & CC.2.1.5.B.2) | **Write and interpret numerical expressions.** parentheses, brackets, braces, numerical expressions  **Analyze patterns and relationships.**  numerical patterns, rules, ordered pairs, coordinate plane  **Understand the place value system.**  place value, decimal, decimal point, patterns, multiply, divide, tenths, thousands, greater than, less than, equal to, ‹, ›, =, compare/comparison, round  **Perform operations with multi-digit whole numbers and with decimals to hundredths.**  multiplication/multiply, division/division, decimal, decimal point, tenths, hundredths, products, quotients, dividends, divisor, rectangular arrays, area models, addition/add, subtraction/subtract, (properties)-rules about how numbers work, reasoning  **Use equivalent fractions as a strategy to add and subtract fractions.** fraction, equivalent, addition/ add, sum, subtraction/subtract, difference, unlike denominator, numerator, benchmark fraction, estimate, reasonableness, mixed numbers  **Apply and extend previous understanding of multiplication and division to multiply and divide fractions.**  fraction, numerator, denominator, operations, multiplication/multiply, division/divide, mixed numbers, product, quotient, partition, equal parts, equivalent, factor, unit fraction, area, side lengths, fractional sides lengths, scaling, comparing  **Convert like measurement units within a given measurement system.**  conversion/convert, metric and customary measurement  From previous grades: relative size, liquid volume, mass, length, 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), hour, minute, second, a.m., p.m., clockwise, counter clockwise  **Present and interpret data.**  line plot, length, mass, liquid volume  **Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.**  measurement,attribute, volume, solid figure, right rectangular prism, unit, unit cube, gap, overlap, cubic units (cubic cm, cubic in. cubic ft. nonstandard cubic units), multiplication, addition, edge lengths, height, area of base  **Graph points on the coordinate plane to solve real-world and mathematical problems.**  coordinate system, coordinate plane, first quadrant, points, lines, axis/axes, x-axis, y-axis, horizontal, vertical, intersection of lines, origin, ordered pairs, coordinates, x-coordinate, y-coordinate  **Classify two-dimensional figures into categories based on their properties.**  attribute, category, subcategory, hierarchy, properties (attributes, features)**,** defining characteristics and non-defining characteristic, , two dimensional  From previous grades: polygon, rhombus/rhombi, rectangle, square, triangle, quadrilateral, pentagon, hexagon, cube, trapezoid, half/quarter circle, circle |
| **Fractions** | Add, Subtract, Multiply and Divide fractions to solve problems  Explain operations as they pertain to fractions  (CC.2.1.5.C.1 & CC.2.1.5.C.2) |
| **Numerical Expressions**  **Order of Operations**  **Patterns** | Write and interpret numerical expressions  Evaluate expressions using the order of operations  Generate, analyze and compare patterns (CC.2.2.5.A.1 & CC.2.2.5.A.4) |
| **Coordinate Plane**  **Two-dimensional Figures** | Plot points in quadrant I  Describe and interpret points given an ordered pair  Identify parts of a coordinate grid  Classify two-dimensional figures based on their properties  (CC.2.3.5.A.1 & CC.2.3.5.A.2) |
| **Measurement**  **Data Displays**  **Volume**  **Three-dimensional Solids** | Solve problems using simple conversions  Organize and display data in order to answer questions  Represent and interpret data using appropriate scale  Solve problems involving computation with fractions using information obtained from data displays  Apply concepts of volume to solve problems  Relate volume to multiplication and to addition  (CC.2.4.5.A.1, CC.2.4.5.A.2, CC.2.4.5.A.4 & CC.2.4.5.A.5) |