| **Concept** | **Competencies** | **Grade Level Vocabulary** |
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| **Ratios, proportions and percent**    **Operations**  **Number Theory Concepts**  **Integers and other rational numbers** | Represent ratio relationships in various forms.CC.2.1.6.D.1  Determine unit rates in context .  Convert measurement units using equivalent ratios.  Solve problems using ratio and rate reasoning.  Interpret and compute quotients of fraction. CC.2.1.6.E.1  Solve problems and compute fluently with whole numbers and decimals. CC2.1.6.E.2    Find common multiples and factors including greatest common factor and least common multiple. CC.2.1.6.E.3  Use the distributive property to express a sum of two numbers.  Use positive and negative numbers to represent quantities in real world contexts. CC.2.1.6.E.4  Plot integers and other rational numbers on a number line and on a coordinate graph. CC.2.1.6.E.4  Interpret the opposite and absolute value of an integer as its distance from zero on a number line. CC.2.1.6.E.4  Compare and order rational numbers. CC.2.1.6.E.4 | **Ratios and Proportional Relationships**  ratio, equivalent ratios, tape diagram, unit rate, part-to-part, part-to-whole, percent  **The Number System**  reciprocal, multiplicative inverses, visual fraction model  multi-digit  greatest common factor, least common multiple, prime numbers, composite numbers, relatively prime, factors, multiples, distributive property, prime factorization  rational numbers, opposites, absolute value, greater than, >, less than, <, greater than or equal to, ≥, less than or equal to, ≤, origin, quadrants, coordinate plane, ordered pairs, *x*-axis, *y*-axis, coordinates  **Expressions and Equations**  exponents, base, numerical expressions, algebraic expressions, evaluate, sum, term, product, factor, quantity, quotient, coefficient, constant, like terms, equivalent expressions, variables  inequalities, equations, greater than, >, less than, <, greater than or equal to, ≥, less than or equal to, ≤, profit, exceed  dependent variables, independent variables, discrete data, continuous  data  **Geometry**  area, surface area, volume, decomposing, edges, dimensions, net, vertices, face, base, height, trapezoid, isosceles, right triangle, quadrilateral, rectangles, squares, parallelograms, trapezoids, rhombi, kites, right rectangular prism, diagonal  **Statistics and**  **Probability**  statistics, data, variability, distribution, dot plot, histograms, box plots, median, mean  this cluster are: box plots, dot plots, histograms, frequency tables, cluster, peak, gap, mean, median, interquartile range, measures of center, measures of variability, data, Mean Absolute Deviation (M.A.D.), quartiles, lower quartile (1st quartile or Q1), upper quartile (3rd quartile or Q3), symmetrical, skewed, summary statistics, outlier |
| **Algebraic expressions and equations** | Write, identify and evaluate numerical expressions involving exponents.  CC.2.2.6.B.1  Write, read and evaluate algebraic expressions CC.2.2.6.B.1  Apply the properties of operations to generate equivalent expressions  CC.2.2.6.B.1  Solve and interpret one variable equations or inequalities in real world and mathematical problems  CC.2.2.6.B.2  Represent and analyze quantitative relationships between Independent and dependent variables  CC.2.2.6.B.3 |
| **Area, surface area and volume** | Determine the area of triangles, quadrilaterals, irregular polygons and compound polygons CC.2.3.6.A.1  Calculate the area of a polygon on a plane given the coordinates of the vertices CC.2.3.6.A.1  Find volumes of right rectangular prisms with fractional edge lengths CC.2.3.6.A.1  Use nets to find surface area of 3 – dimensional figures CC.2.3.6.A.1 |
| **Data and Distributions** | Display data in dot plots, histograms and box-and-whisker plots CC.2.4.6. B.1  Determine quantitative measures of center and variability CC.2.4.6.B.1  Choose the appropriate measure of center and variability for a set of data CC.2.4.6.B.1 |