



**Dover Area School District Curriculum K-U-D
Fifth Grade Math**

Standards	Eligible Content	Know	Understand	Do
CC.2.1.5.B.1 Apply place-value concepts to show an understanding of operations and rounding as they pertain to whole numbers and decimals	M05.A-T.1.1 Demonstrate understanding of place-value of whole numbers and decimals, and compare quantities or magnitudes of numbers.	Place Value Terms (tenths, hundredths, thousandths) powers of 10; base ten; one-tenth; ten times; expanded; written form; standard	Place value helps us understand the relationships in numbers.	Round numbers Compare numbers Place value relationships Representations of decimals Real world context
CC.2.1.5.B.2-Extend an understanding of operations with whole numbers to perform operations including decimals.	M05.A-T.2.1 Use whole numbers and decimals to compute accurately (straight computation or word problems).	addition, subtraction, multiplication, division, operation, unit; algorithm, Place Value Terms (tenths, hundredths, thousandths) powers of 10, base ten, one-tenth, ten times, expanded, written form, standard, Place Value Terms (ones, tens, hundreds, thousands), area model, product, factors, divisor, dividend, quotient, partial quotient, strategy, estimate, round up, ignore, remainder	Knowledge of mathematical operations help solve real world problems	Solve problems using addition, subtraction, multiplication, and division Solve multi-step problems using various strategies
CC.2.1.5.C.1 Use the understanding of equivalency to add and subtract fractions.	M05.A-F.1.1 Solve addition and subtraction problems involving fractions (straight computation or word problems).	equivalent fraction, multiple, factor, quick common denominator, algorithm, denominator, numerator, quotient, representation, quick common denominator	Understanding Equivalent fractions help us to understand the operations of fractions.	Make equivalent fractions Find common denominators Use strategies like quick common denominator to make equal pieces Use fraction circles to model
CC.2.1.5.C.2- Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	M05.A-F.2.1 Solve multiplication and division problems involving fractions and whole numbers (straight computation or word problems).	product, quotient, numerator, denominator, equivalent fractions; dividend, divisor, fraction of, improper fraction, unit, area-model, whole number, mixed number, area scaling, parts of a whole; parts of a part	Using properties and rules of multiplication and division, and visuals I can solve real world problems incorporating fractions.	Multiply fractions by fractions Multiply fractions and mixed numbers and apply to problem solving Area models Division problems with fraction Keep, change, and flip (reciprocal)
CC.2.2.5.A.1 Interpret and evaluate numerical expressions using order of operations.	M05.B-O.1.1 Analyze and complete calculations by applying the order of operations.	Grouping symbols, parenthesis, brackets, numerical expression, variable, PEMDAS, sum, product, quotient, difference, base, exponent, numerical equation,	Evaluating order of operations can help me to solve problems	Evaluate expressions using order of operation Write expressions to represent real world problems Group numbers with brackets and parentheses
CC.2.2.5.A.4 Analyze patterns and relationships using two rules.	M05.B-O.2.1 Create, extend, and analyze patterns.	Term, relationship, corresponding term, adjacent, rule, sequence, decrease, increase	Use rules and patterns to find relationships in math situations.	Find patterns and assigne rules Create tables to extend patterns Apply real world knowledge to a pattern Graph patterns Identify corresponding terms with rules
CC.2.3.5.A.1--Graph points in the first quadrant on the coordinate plane and interpret these points when solving real world and mathematical problems.	M05.C-G.1.1 Identify parts of a coordinate grid and describe or interpret points given an ordered pair.	x-axis, y- axis, coordinate grid, intersect, ordered pair, origin, perpendicular, plot x-coordinate, y-coordinate, extrapolate, interpolate	Understanding using plotted points on a coordinate is a way to solve problems.	Locate origin Graph points using ordered pairs Identify parts of the coordinate plane Given a point identify the ordered pair Use coordinates in connection to maps
CC.2.3.5.A.2 Classify two dimensional figures into categories based on an understanding of their properties.	M05.C-G.2.1 Use basic properties to classify two-dimensional figures.	hierarchy, quadrilateral, polygon, trapezoid, rhombus, attribute, rhombus, square, rectangle, trapezoid, isoscoles triangle, categories, equilateral triangle, right angle, acute angle, congruent, obtuse angle, straight angle, adjacent, vertex	Understanding how polygons are related and can help classify them into a hierarchy.	Identify shapes by name Classify shapes by 2D properties (sides/angles)
CC.2.4.5.A.1 Solve problems using conversions within a given measurement system.	M05.D-M.1.1.1 Convert between different-sized measurement units within a given measurement system. A table of equivalencies will be provided.	metric, customary, inches, feet, yards, miles, metric system, unit, conversions, relationship, convert, equivalency, powers of 10s, exponents	Understand how equivalent quantities can be represented by different units.	Compare and convert customary units of length, width, volume using multiplication and or division
CC.2.4.5.A.2 Represent and interpret data using appropriate scale	M05.D-M.2.1.1-Solve problems involving computation of fractions by using information presented in line plots.	line plots, axis, y-axis, x-axis, horizontal, vertical, displacement, fractions, fractional scales, tables, interpret, relationship, interpret, mean, median, mode, range,	Understand how to interpret fractional data on a line plot to solve real world problems.	Create line plots Interpret line plots using mean, median, mode, and range



**Dover Area School District Curriculum K-U-D
Fifth Grade Math**

Standards	Eligible Content	Know	Understand	Do
CC.2.4.5.A.2 Represent and interpret data using appropriate scale	M05.D-M.2.1.2-- Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs.	pictograph, tally chart, title, scale, bar graph, line graph, x and y axis, labels, mean, median, mode and range	Understand how to interpret data using variety of representations to solve problems.	Look at graphs, interpret data, and draw inferences using data and charts with fractional and mixed numbers
CC.2.4.5.A.4 Solve problems involving computation of fractions using information provided in a line plot.	M05.D-M.2.1.1-Solve problems involving computation of fractions by using information presented in line plots.	line plots, axis, y-axis, x-axis, horizontal, vertical, displacement, fractions, fractional scales, tables, interpret, relationship, interpret, mean, median, mode, range, improper fractions, mixed numbers	Understand how to compute fractional data on a line plot to solve real world problems.	Perform operations with fractions and mixed numbers Use fractions and mixed numbers to make graphs and line plots
CC.2.4.5.A.4 Solve problems involving computation of fractions using information provided in a line plot.	M05.D-M.2.1.2-- Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs.	line plots, axis, y-axis, x-axis, horizontal, vertical, displacement, fractions, fractional scales, tables, interpret, relationship, interpret, mean, median, mode, range, improper fractions, mixed numbers	Understand how to interpret and compute fractional data using variety of representations to solve problems.	Perform operations with fractions and mixed numbers Use fractions and mixed numbers to make graphs and line plots
CC.2.4.5.A.5 Apply concepts of volume to solve problems and relate volume to multiplication and to addition.	M05.D-M.3.1.1Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems. Formulas will be provided.	units, cubic units, length, width, height, 3-dimensional, 2-dimensional, rectangular prism, base, area of base, square units, volume, nonstandard objects, faces, edges, sides, dimensions,	It is important to understand what volume is and measure volume using formulas.	Identify dimensions Define and apply properties of volume Determine and apply what formula to use in various situations
CC.2.4.5.A.5 Apply concepts of volume to solve problems and relate volume to multiplication and to addition.	M05.D-M.3.1.2--Find volumes of solid figures composed of two non-overlapping right rectangular prisms.	units, cubic units, length, width, height, 3-dimensional, 2-dimensional, rectangular prism, base, area of base, square units, volume, nonstandard objects, faces, edges, sides, composite, additive	Measure volume in real world context to solve problems.	Find the volume of 2 prisms separately Add to find total volume Find the volume of composite prisms