



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

Standards	Know	Understand	Do
<p>CC.2.1.2.B.1 Use place value concepts to represent amounts of tens and ones and to compare three digit numbers.</p>	<p>Know place value concepts to 100, know/use comparison symbols (&lt;, &gt;, and =)</p> <p>vocabulary terms: greater than, less than, equal to, expanded form, ones, tens, hundreds</p>	<p>Understanding place value allows us to compare quantities and values.</p>	<p>compare numbers up to 100, up to 1,000            put numbers in order to 100, to 1,000            decide greatest and least (word problems) up to 100, up to 1,000            determine inequalities with addition and subtraction up to 100            show and demonstrate place value models using 10s and 1s            convert to/from a number using 10s and 1s            regroup 10s and 1s</p>
<p>CC.2.1.2.B.2 Use place value concepts to read, write, and skip count to 1,000.</p>	<p>Know how to skip count by 2s, 5s, 10s, and 100s, be able to read the number words, identify the number that represents the number word</p> <p>vocabulary terms: skip count, pattern count, ___teen, ___ty, hundred, thousand</p>	<p>Reading and writing numbers, as well as pattern counting, are important for quickly counting larger numbers.</p>	<p>practice skip counting            reading and understanding skip counting stories, patterns, and sequences            practice counting patterns up to 100/up to 1,000            complete skip counting puzzles using a hundreds chart and/or number line            writing numbers to 100/to 1,000 in words (converting words to digits)</p>
<p>CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1,000.</p>	<p>Need to have knowledge of different place values within multi-digit numbers, need to have knowledge of how much each digit equals based on position in place value, need to know what function the + and - symbols represent (i.e.: + means counting up, - means counting back), understand what a number model/number sentence is</p> <p>vocabulary terms: number model, number sentence, addition, subtraction, digit, place value, ones, tens, hundreds, thousands, plus, minus</p>	<p>Understanding place value helps you perform tasks using operations of numbers.</p>	<p>add/subtract multiples of 100            practice addition/subtraction with 3-digit numbers            read and understand addition/subtraction word problems (up to 3-digits)            complete and/or solve addition/subtraction sentences (up to 3-digits)            balance addition/subtraction equations (up to 3-digits)</p>



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<p>CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100.</p>	<p>Be able to create, represent, and solve addition and subtraction number stories, know strategies for adding and subtracting basic facts, have an understanding of fact families, have an understanding of helper facts</p> <p>vocabulary terms: fact families, helper facts, addition, subtraction, doubles, number story, number model, unit</p>	<p>Understanding place value helps you perform addition and subtraction.</p>	<p>Add/subtract multiples of 10 and 100 Add/subtract a 2-digit and a 1-digit number and/or two 2-digit numbers - with or without regrouping Read and understand single- and double-digit addition/subtraction word problems (up to 10, up to 100) Add/subtract three and/or four numbers up to 2-digits each, in both number and word problem form Select ways to make a number using addition/subtraction Balance single- and double-digit addition and subtraction equations up to 100</p>
<p>CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.</p>	<p>Have a number sense up to 20, have fluently mastered +/- fact families up to 20 without the aid of additional resources, have knowledge of combinations of 10, have knowledge of doubles facts</p> <p>vocabulary terms: addition, subtraction, fact families, combinations of 10, doubles facts, helper facts</p>	<p>Understanding how to mentally add &amp; subtract numbers allows us to quickly perform addition and subtraction without using resources.</p>	<p>Solve and write addition and/or subtraction problems to 20 in number and word form Add three or more 1-digit numbers Write related addition &amp; subtraction facts Use addition and subtraction to balance equations up to 20 Use addition/subtraction to complete number patterns</p>
<p>CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.</p>	<p>Understand that arrays are repeated addition, have mastery of pattern counting, have knowledge of how to use manipulatives to create group/arrays</p> <p>vocabulary terms: array, column, row, equal groups, equivalent, pattern counting, skip counting</p>	<p>Understand that putting together equal groups of objects is repeated addition.</p>	<p>Determine the number of dots/objects in an array and write addition number models to represent them Make an array and write a related number model Represent equal groups of objects Solve equal groups and array number stories</p>
<p>CC.2.3.2.A.1 Analyze and draw two- and three-dimensional shapes having specified attributes.</p>	<p>Know names of 2-dimensional and 3-dimensional shapes (up to 10 sides), have the ability to distinguish between 2-D and 3-D shapes, understand that 2-D shapes make up 3-D shapes</p> <p>vocabulary terms: line, line segment, symmetry, face, apex, angle, vertex, edge, 2-dimensional, 3-dimensional, attributes, cube, parallel, parallel sides, polygon, right angle, quadrilateral, side, vertical, horizontal</p>	<p>Recognizing different shapes and attributes are essential for understanding geometry.</p>	<p>Name the two-dimensional shape Count sides and vertices Compare sides and vertices Identify congruent shapes Name the three-dimensional shape Select three-dimensional shapes Count vertices, edges, and faces Compare vertices, edges, and faces</p>



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CC.2.3.2.A.2 Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	<p>Know how to draw straight lines to equally divide shapes, have an understanding of how fractional parts make a whole</p> <p>vocabulary terms: half, quarter, third, whole, part, numerator, denominator, whole number, fraction, equivalent fractions, partition, equal parts, symmetry</p>	<p>Understand that shapes can be partitioned into equal parts.</p>	<p>Show equal parts Determine halves, thirds, and fourths Identify the fraction Determine which shape illustrates the fraction</p>
CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.	<p>have knowledge of appropriate measurement tools, be able to pick the correct measurement tool based on the item/distance being measured, be able to pick the correct unit of measurement based on the item/distance being measured</p> <p>vocabulary terms: unit, tool, estimate, standard unit of measurement, nonstandard unit of measurement, U.S. customary unit of measurement, metric unit of measurement, line segment</p>	<p>Understand how to select and use the appropriate measurement tool(s).</p>	<p>Measure using an inch ruler Determine which customary unit of length is appropriate Measure using a centimeter ruler Determine which metric unit of length is appropriate Choose the appropriate measuring tool</p>
CC.2.4.2.A.2 Tell and write time to the nearest five minutes using both analog and digital clocks.	<p>skip counting by 5s, have an understanding that the hands on an analog clock are in constant motion (the hour hand moves in conjunction with the minute hand), have an understanding of the direction of "clockwise" and "counterclockwise," ability to read an analog clock and correctly write the matching digital time, ability to read a digital clock and correctly draw/manipulate the hour and hand minute hand of an analog clock to represent the time</p> <p>vocabulary terms: hour, half-hour, analog clock, digital clock, hour hand, minute hand, quarter hour, half-past, quarter of, quarter past, A.M./P.M., clockwise, counterclockwise</p>	<p>Understand that clocks show time in different ways.</p>	<p>Match analog clocks and times Match analog and digital clocks Read clocks and write times Tell time using words: o'clock, half, quarter</p>



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CC.2.4.2.A.3 Solve problems and make change using coins and paper currency with appropriate symbols	<p>understanding of name and value of each coin, ability to make equivalent amounts, ability to count forward/backward to make change, ability to write money amounts correctly using the correct symbols (cent sign/dolar sign), ability to represent a specified amount given a set of coins</p> <p>vocabulary terms: penny, nickel, dime, quarter, dollar, coins, change, decimal point, dollar sign, heads/tails, cents, estimate</p>	Understand how to combine money amounts and make change in a real life setting.	<p>Identify names and values of coins            Count and determine equivalent amounts money up to \$1 and up to \$5            Exchange money and/or show an amount using the least number of coins            Compare groups of coins and determine which amount shows more - up to \$5            Determine how much more to make a dollar, to make purchases, and/or to make change            Apply money counting principles to problem-solving</p>
CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.	<p>ability to recognize and identify parts of graphs, ability to collect and organize data, ability to correctly create the chosen data representation bar graph, line plot, pictograph</p> <p>vocabulary terms: data, line plot, picture graph, bar graph, key, mean, median, mode, vertical, horizontal, title)</p>	Understand how to show and interpret data in multiple visual formats.	<p>Create and Interpret tally charts            Create and interpret bar graphs            Create and Interpret line plots            Create and interpret picture graphs</p>
CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length.	<p>ability to recognize and identify the correct measurement tool to use, ability to recognize and identify which unit of measurement to use</p> <p>vocabulary terms; addition, subtraction, length, measurement, U.S. customary units of measurement, metric units of measurment, non-standard units of measurement, estimate, measuring tools</p>	Understand that objects can be extended or reduced in length.	<p>Solve customary units of length: word problems            Solve metric units of length: word problems            Determine perimeter            Solve perimeter word problems</p>