

California Common Core State Standards Comparison – SECOND GRADE

Standards for Mathematical Practice

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| <ol style="list-style-type: none"> 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others 4. Model with mathematics. | <ol style="list-style-type: none"> 5. Use appropriate tools strategically 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. |
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| Current CA Math Content Standards | # of Items | CST Released Items # | California Common Core State Standards - Mathematics | Notes |
|--|------------|----------------------|--|-------|
| NUMBER SENSE: | 38 58% | | | |
| NS 1.0 Students understand the relationship among numbers, quantities, and place value in whole numbers up to 1,000. | | | Number and Operations in Base Ten 2.NBT -Understand place value. (Cluster Statement) | |
| *NS 1.1 Count, read, and write numbers to 1000 and identify the place value for each digit. | 3 | 1-5 | 2.NBT.1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). 2.NBT.2. Count within 1000; skip-count by 2s , 5s, 10s, and 100s. 2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | |
| NS 1.2 Use words, models, and expanded form to represent numbers to 1000 | 1 | 6-8 | 2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | |
| *NS 1.3 Order and compare whole numbers up to 1000 using the symbols <, >, = | 4 | 9-14 | 2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. | |

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| NS 2.0 Students estimate, calculate, and solve problems involving addition and subtraction of two-digit and three-digit numbers. | | | <p>Operations and Algebraic Thinking 2.OA -Represent and solve problems involving addition and subtraction. -Add and subtract within 20.</p> <p>Number and Operations in Base Ten 2.NBT -Use place value understanding and properties of operations to add and subtract. (Cluster Statement)</p> | |
| *NS 2.1 Understand and use the inverse relationship between addition and subtraction (an opposite number sentence for $8+6=14$ is $14-6=8$) to solve problems and check solutions. | 2 ½ | 15-18 | <p>2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations. <i>(Explanations may be supported by drawings or objects.)</i></p> | |
| *NS 2.2 Find the sum or difference of two whole numbers up to three digits long. | 4 | 19-23 | <p>2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> | |

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| NS 2.3 Use mental arithmetic to find the sum or difference of two-digit numbers. | NA | | 2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. ¹ 2.OA.2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NBT.8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. | |
| NS 3.0 Students model and solve simple problems involving multiplication and division. | | | Operations and Algebraic Thinking 2.OA -Work with equal groups of objects to gain foundations for multiplication. (Cluster Statement) | |
| *NS 3.1 Use repeated addition, arrays, counting by multiples to do multiplication. | 2 | 24-26 | 2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. <u>2.OA.5. Use repeated addition and counting by multiples to demonstrate multiplication.</u> | 3.OA.3. |
| *NS 3.2 Use repeated subtraction, equal sharing, and forming equal groups to do division with remainders. | 3 | 27-30 | <u>2.OA.6. Use repeated subtraction and equal group sharing to demonstrate division.</u> | 3.OA.3. |
| *NS 3.3 Know the multiplication tables of 2's, 5's, and 10's (to "times 10") and commit them to memory. | 3 | 31-34 | | 3.OA.7 |
| | | | 2.OA.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. | |

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| NS 4.0 Students understand that fractions and decimals can refer to parts of a set and parts of a whole. | | | Geometry 2.G -Reason with shapes and their attributes. (Cluster Statement) | |
| *NS 4.1 Recognize, name and compare unit fractions up to $\frac{1}{12}$. (Unit=numerator of 1) | 3 | 35-38 | | 3.NF.1. 3.NF.2. |
| *NS 4.2 Recognize fractions of a whole and parts of a group ($\frac{1}{4}$ of a pie, $\frac{2}{3}$ of 15 balls) | 3 | 39-41 | | 3.NF.1. |
| *NS 4.3 Know that when all fractional parts are included, such as four-fourths, the result is equal to the whole and to one. | 3 | 42-45 | 2.G.3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words <i>halves</i> , <i>thirds</i> , <i>half of</i> , <i>a third of</i> , etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. | |
| NS 5.0 Students model and solve problems by representing, adding and subtracting amounts of money. | | | Measurement and Data 2.MD -Work with time and money. (Cluster Statement) | |
| *NS 5.1 Solve problems using combinations of coins and bills. | 3 | 46-50 | 2.MD.8. Solve word problems involving <u>combinations of</u> dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <i>Example: If you have 2 dimes and 3 pennies, how many cents do you have?</i> | |
| *NS 5.2 Know and use the decimal notation and the dollar and cents symbols for money. | 3 | 51-54 | | |

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| NS 6.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones, tens, hundreds and thousands places. | | | Number and Operations in Base Ten 2.NBT -Use place value understanding and properties of operations to add and subtract. Measurement and Data 2.MD -Measure and estimate lengths in standard units. (Cluster Statement) | |
| | | | <u>2.NBT.7.1 Use estimation strategies in computation and problem solving with numbers up to 1000.</u> <u>2.NBT.7.2 Make reasonable estimates when adding or subtracting.</u> | |
| NS 6.1 Recognize when an estimate is reasonable in measurements (closest inch) | 1/2 | 55 | <u>2.MD.3.1 Verify reasonableness of the estimate when working with measurements (e.g., closest inch). (CA-Standard NS 6.1)</u> | |
| ALGEBRA AND FUNCTIONS: | 6 9% | | | |
| AF 1.0 Students model, represent, and interpret number relationships to create and solve problems involving addition and subtraction. | | | | |
| *AF 1.1 Use the commutative and associative rules to simplify mental calculations and check results. | 4 | 56-60 | | 3.OA.5. |

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| AF 1.2 Relate problem situations and number sentences involving addition and subtraction. | 1 | 61-62 | 2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (See Table 1) 2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | |
| AF 1.3 Solve addition and subtraction problems using data from simple charts, picture graphs, and number sentences. | 1 | 63-64 | 2.NBT.7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. | |
| MEASUREMENT AND GEOMETRY: | 14 22% | | | |
| MG 1.0: Students understand that measurement is accomplished by identifying a unit of measure, iterating that unit and comparing it to the item to be measured. | | | Measurement and Data 2.MD -Measure and estimate lengths in standard units. -Work with time and money. -Represent and interpret data. (Cluster Statements) | |
| MG 1.1 Measure the length of objects by iterating a non-standard or standard unit. | 1 | 65-66 | 2.MD.1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. | |

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| MG 1.2 Use different units to measure the same object and predict whether the measure will be greater or smaller when a different unit is used. | 1 | 67 | 2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. | |
| *MG 1.3 Measure the length of an object to the nearest inch and or centimeter. | 3 | 68-73 | 2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. | |
| MG 1.4 Tell time to the nearest quarter hour and know time relationships. (e.g., minutes in an hour, days in a month, weeks in a year). | 2 | 74-75 | 2.MD.7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. <u>Know relationships of time (e.g., minutes in an hour, days in a month, weeks in a year).</u> | |
| MG 1.5 Determine the duration of time intervals in hours (e.g., 11:00 a.m. to 4:00 p.m.). | 1 | 76-77 | | 3.MD.1. |
| | | | 2.MD.3. Estimate lengths using units of inches, feet, centimeters, and meters. | |
| | | | 2.MD.4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. | |
| *MG 2.0 Students identify and describe the elements that compose common figures in the plane and common objects in space. | | | Geometry 2.G -Reason with shapes and their attributes. (Cluster Statement) | |

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| *MG 2.1 Describe and classify plane and solid geometric shapes (e.g., circle, triangle, square, rectangle, sphere, pyramid, cube, rectangular prism) according to the number and shape of faces, edges, and vertices. | 3 | 78-80 | 2.G.1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. <i>(Sizes are compared directly or visually, not compared by measuring.)</i> Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. | |
| *MG 2.2 Put shapes together and take them apart to form other shapes(two congruent right triangles can form a rectangle) | 3 | 81-85 | | |
| | | | 2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. | |
| | | | Measurement and Data 2.MD -Relate addition and subtraction to length. (Cluster Statement) | |
| | | | 2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. | |
| | | | 2.MD.2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. | |
| STATISTICS, DATA ANALYSIS, AND PROBABILITY | 7 11% | | | |
| *SDAP 1.0 Students collect, record, organize, display and interpret numerical data on bar graphs, and other representations. | | | Measurement and Data 2.MD -Represent and interpret data. (Cluster Statement) | |

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| SDAP 1.1 Record numerical data in systematic ways, keeping track of what/who has been counted. | 2 | 86-89 | 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems ⁴ using information presented in a bar graph. | |
| SDAP 1.2 Represent the same data set in more than one way (charts with tallies, and bar graph) | 2 | 90-92 | 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems ⁴ using information presented in a bar graph. | |
| SDAP 1.3 Identify features of data sets (range and mode) | 2 | 93-94 | | CA CCSS Grade 6 |
| SDAP 1.4 Ask and answer simple questions related to data representations. | 1 | 95-96 | 2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems ⁴ using information presented in a bar graph. | |
| *SDAP 2.0 Students demonstrate an understanding of patterns and how they grow, and describe them in general ways. | | | | |
| SDAP 2.1 Recognize, describe, extend and explain how to get the next term in linear patterns (e.g., 4, 8, 12,...; the number of ears on 1 horse, 2 horses, 3 horses, 4 horses). | NA | | | 3.OA.9. |
| SDAP 2.2 Solve problems involving simple number patterns. | NA | | | 3.OA.9. |