Publisher/Developer: *Amplify Education, Inc.*

Program Title: *Amplify Desmos Math California, Grade 2*

Components: *Teacher Edition; Student Edition; Assessment Resources; Centers Resources; Intervention, Extension, and Investigation Resources; Math Language Development Resources; Additional Practice Resources; Additional Practice Student Workbook; Student Digital License; Teacher Digital License*

Approved by the State Board of Education January 18, 2024

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# 2025 California Common Core State Standards: Mathematics Adoption[[1]](#footnote-0) Standards Map Template Grade Two

## Organization Around Major Conceptual Ideas

Evaluation criterion statement 1.2 requires that programs be consistent with the content of the 2023 *Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve* (*Mathematics Framework*). In order to be considered suitable for adoption by the State Board of Education, a publisher's or developer’s program must present content organized around major conceptual ideas, as demonstrated in chapters 6, 7, and 8, and as described in the Publishers and Content Developers Guide to the Mathematics Framework, found in chapter 13 of the *Mathematics Framework*.

1. Publishers/developers should use the first column of this table to list the major conceptual ideas used to organize the instructional program.
2. In the second column, publishers/developers should show how these relate to the Framework’s Big Ideas.
3. In the third column, publishers/developers should show the organization of the program by showing how the content standards are mapped to each of the major conceptual ideas or Big Ideas used by the program.

| **Major conceptual ideas in the program** | **How do the program’s major conceptual ideas map to the framework’s Big Ideas?** | **How are standards covered under the major conceptual ideas?** | **Met Yes** | **Met No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| **Unit 1:** Working With Data and Solving Comparison Problems  *Build toward fluency with addition and subtraction within 100 using a variety of efficient strategies. Create and interpret bar graphs and picture graphs and solve story problems involving addition and subtraction within 100 in data contexts.* | * **Number Strategies:** Students build toward fluency with addition and subtraction within 100 using, comparing, and justifying a variety of efficient strategies, including composing and decomposing, reasoning about place value, and using the relationship between addition and subtraction. * **Represent Data:** Students sort, collect, represent, and interpret data using bar graphs and picture graphs.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.OA.1:** Students use addition and subtraction to solve *Compare* story problems with unknowns in all positions. They represent the problems using tape diagrams and equations with a symbol for the unknown number. * **2.OA.2:** Students begin the year adding and subtracting within 20, building toward fluency. They use counting techniques, making ten, decomposing addends and using known sums, and the relationship between addition and subtraction. They move away from manipulatives and toward mental strategies, including knowing sums from memory. * **2.NBT.5:** As they solve *Compare* story problems, students work toward fluency with adding and subtracting within 100. They use a variety of strategies, including reasoning about place value and using the relationship between addition and subtraction. * **2.MD.10:** Students make sense of the structure and features of picture graphs and bar graphs with single-unit scales. They interpret data in these graphs by solving *Put Together/Take Apart* and *Compare* problems. They move on to draw picture graphs and bar graphs to represent data sets with up to four categories, including data they have collected using their own survey questions. Students solve *Put Together/Take Apart* and *Compare* problems using data presented in picture graphs and bar graphs. |  |  |  |
| **Unit 2:** Adding and Subtracting Within 100  *Continue building toward fluency with addition and subtraction within 100 using a variety of efficient strategies. Use addition and subtraction within 100 to solve story problems, including problems involving money.* | * **Number Strategies:** Students continue to build toward fluency with addition and subtraction within 100 using and comparing a variety of efficient strategies, including counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction. * **Dollars & Cents:** Students are introduced to pennies, nickels, dimes, quarters, dollar bills, and their monetary values. They find the total values of mixed groups of coins or bills and solve a variety of story problems involving money. * **Represent Data:** Students interpret four data representations involving coins (one of which is a bar graph) to prepare them for adding the values of groups of coins or bills. In Investigation 1: *The Weight of Waste*, students collect data regarding waste and create data displays, including ways in which waste can be reduced. This Investigation also addresses the Big Idea **Number Strategies***.*   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.OA.1:** Students use addition and subtraction within 100 to solve *Add To/Take From, Put Together/Take Apart* and *Compare* story problems with unknowns in all positions. They represent the problems using tape diagrams and equations with a symbol for the unknown number. * **2.OA.2:** Students use the *Number Talk* routine to build toward fluency with subtracting within 20. * **2.NBT.5:** As they solve story problems and find the total values of groups of mixed coins or bills, students work toward fluency with adding and subtracting within 100. They use a variety of strategies, including counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction. * **2.NBT.6:** As students find the total values of groups of mixed coins or bills, they add two-digit numbers using a variety of strategies, including skip counting, place value reasoning, and properties of operations (adding in any order). They further apply these strategies to solve a variety of two-step story problems. * **2.NBT.7.1:** Before solving *Compare* story problems involving addition and subtraction within 100, students estimate the values of the unknown amounts and justify their estimates. * **2.NBT.9:** Students use a variety of efficient subtraction strategies to subtract within 100 — including composing a ten, decomposing, and compensation. They explain why these strategies work using base-ten blocks, drawings and tape diagrams, place value reasoning, and properties of operations (emphasizing the relationship between addition and subtraction). * **2.MD.8:** Students are introduced to pennies, nickels, dimes, quarters, and dollar bills. They use the ¢ and $ symbols as they find the values of groups of coins or bills. Students solve a variety of story problems involving money in these denominations. * **2.MD.10:** Students interpret four data representations involving coins (one of which is a bar graph) to prepare them for adding the values of groups of coins or bills. |  |  |  |
| **Unit 3:** Measuring Length  *Estimate, measure, and compare lengths of objects using standard length units. Represent and interpret measurement data using line plots, and solve story problems involving length measurements by adding and subtracting within 100.* | * **Measure and Compare Objects:** Students estimate, measure, and compare the lengths of objects using standard length units. They select and use appropriate tools for measuring the lengths of objects. * **Represent Data:** Students generate length measurement data, represent the data in line plots, and interpret the data. * **Dollars & Cents:** Students solve a two-step story problem involving length measurements and money, representing the problem with a tape diagram and equation. * **Problem Solving With Measure:** Students solve one- and two-step story problems (*Compare*, *Add To/Take From*, and *Put Together/Take Apart*) involving length measurements, adding and subtracting within 100. * **Number Strategies:** Students solve one- and two-step story problems involving length measurements and addition and subtraction within 100. They use and justify a variety of efficient strategies, including counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.MD.1:** Students select and use tools — including rulers, yardsticks, meter sticks, and measuring strips — to measure the lengths of a variety of objects, such as classroom objects and images of animals, costume materials, rectangles, and ribbons, bracelets, and books. * **2.MD.2:** Students measure the lengths of longer objects in both meters and centimeters and in both inches and feet, noting that more units are needed to measure the length of the same object if a shorter length unit is used. * **2.MD.3:** Before measuring, students estimate the lengths of objects in centimeters, inches, feet, and meters. They explain their estimation strategies, which may include trial and error, repeating units mentally (such as base-ten cubes, tens rods, and inch tiles) and using other objects of known lengths as benchmarks. Students measure the lengths and then compare them to their estimates to reflect on their estimation strategies. * **2.MD.4:** Students measure and compare the lengths of objects initially using base-ten cubes and tens rods, then using standard units (centimeters) to measure and compare the lengths of objects. They express the difference in lengths between two objects using centimeters. * **2.MD.5:** Students add and subtract within 100 to solve a variety of one- and two-step story problems (*Compare*, *Add To/Take From*, and *Put Together/Take Apart*) involving lengths in centimeters, meters, inches, and feet. They represent the problems using tape diagrams and equations with a symbol for the unknown. * **2.MD.9:** Students generate measurement data by measuring the lengths of a variety of objects including ribbons, bracelets, and books. They create line plots to represent the data and interpret the data by answering questions. * **2.NBT.5:** As they solve one- and two-step story problems (*Compare*, *Add To/Take From*, and *Put Together/Take Apart*) involving length measures, students work toward fluency with adding and subtracting within 100. They use a variety of computation strategies, counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction. * **2.OA.2:** As students interpret line plots that show measurement data, they answer questions by fluently adding or subtracting within 20. |  |  |  |
| **Unit 4:** Addition and Subtraction on the Number Line  *Understand the number line and use number lines to interpret, represent, and compare whole numbers within 100. Connect the operations of addition and subtraction within 100 to the number line.* | * **Measure and Compare Objects:** Students interpret, represent, and compare numbers on a number line, using equally-spaced tick marks and points that represent linear measures from zero. * **Problem Solving With Measure:** Students use number lines to represent and solve story problems (*Add To/Take From, Put Together/Take Apart, Compare*) involving length measurements and addition and subtraction within 100. * **Skip Counting to 100:** Students use counting strategies — including skip counting by two, five, and ten — to represent an object’s movement from one point to another on a number line. They count on and count back to reason about the direction of the movement. * **Number Strategies:** Students solve story problems involving addition and subtraction within 100. They use and compare a variety of representations, including number lines, and a variety of computation strategies including counting on/back or skip counting, and decomposing numbers. * **Dollars & Cents:** In Investigation 2: *Create a Store*, practice addition and subtraction with two-digit numbers through a hands-on project where they create and manage their own store. By choosing and pricing items, students will calculate total costs and determine change from a purchase. This Investigation also addresses the Big Idea **Number Strategies***.*   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.MD.5:** Students use addition and subtraction within 100 to solve story problems (*Take From* and *Take Apart*) involving length measurements and use number lines and equations with a symbol for the unknown to represent the problems. * **2.MD.6:** Students are introduced to the number line (with equally-spaced tick marks) as a way to represent and compare whole numbers within 100 and represent addition and subtraction within 100. They represent whole numbers as lengths from zero on a number line. * **2.NBT.2:** Students use the *Choral Count* routine to practice skip counting by five from 0 to 100 and move on to use counting strategies — including skip counting by two, five, and ten — to represent an object’s movement from one point to another on a number line. They count on and count back to reason about the direction of the movement. * **2.NBT.5:** As they solve story problems (*Add To/Take From, Put Together/Take Apart* and *Compare*), students work toward fluency with adding and subtracting within 100. They connect the operations to movements along the number line. Students count on/back and decompose while representing each part with a jump along the number line. They compare number lines to other representations (e.g., base-ten blocks). * **2.NBT.7.1:** Within the context of plants growing in a row that is modeled by a number line, students estimate where plants are located and then justify the reasonableness of their estimate. * **2.OA.1:** Students use addition and subtraction within 100 to solve *Add To/Take From, Put Together/Take Apart* and *Compare* story problems with unknowns in all positions. They represent the problems using number line drawings and equations with a symbol for the unknown number. |  |  |  |
| **Unit 5:** Numbers to 1,000  *Use base-ten blocks and skip counting to understand the composition and place value of three-digit numbers. Represent numbers up to 1,000 in standard form, word form, and expanded form. Apply place value reasoning and use number lines to compare three-digit numbers.* | * **Skip Counting to 100:** Students expand their knowledge of the base-ten system to view hundreds as bundles of tens and use expanded notation to understand composition and place value of numbers up to 1,000. They use skip counting to count by 10 and 100 to find different ways to compose three-digit numbers. Students apply place value reasoning to compare and order three-digit numbers up to 1,000.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.NBT.1:** To develop place value understanding of three-digit numbers, students use base-ten blocks to show how the digits of a three-digit number are composed of a given amount of hundreds, tens, and ones. * **2.NBT.1.a:** Students understand “a hundred” as a unit by representing the amount using bundles of 10 tens, 100 ones, or a combination of tens and ones. * **2.NBT.1.b:** Students use base-ten blocks to compose three-digit numbers that are multiples of 100 in different ways — using only tens, using only hundreds, and using a combination of tens and hundreds. They recognize that three-digit numbers that are multiples of 100 can be thought of as an amount of hundreds (with 0 tens and 0 ones). * **2.NBT.2:** Students use skip counting by 10 and 100 to count a collection of base-ten blocks that represent a three-digit number. They skip count by 10 and 100 to find different ways to compose a three-digit number that is a multiple of 100. * **2.NBT.3:** Students use place value charts and base-ten blocks to write three-digit numbers using base-ten numerals (standard form), number names (word form), and expanded form based on a given amount of hundreds, tens, and ones. * **2.NBT.4:** Students use base-ten blocks, number lines, and place value understanding to compare two three-digit numbers, recording the comparisons using the symbols <, =, and >. They reason about the number of hundreds, tens, and ones by analyzing the digits of three-digit numbers. Students move on to order lists of more than two numbers. * **2.NBT.5:** Students use the *True or False?* and *Number Talk* routines to find the values of addition expressions within 100 and to evaluate comparison statements within 100, continuing to develop their fluency with addition and subtraction within 100. * **2.MD.6:** Students recognize that the structure of the number line can be extended to three-digit numbers. They represent numbers up to 1,000 as lengths from zero on number lines and use number lines to compare numbers. |  |  |  |
| **Unit 6:** Geometry and Time  *Identify, sort, draw, measure, and compare flat and solid shapes based on their attributes. Partition rectangles and circles (including analog clock faces) into equal parts (halves, thirds, and fourths). Explore relationships of time using calendars and tell and write time to the nearest five minutes.* | * **Seeing Fractions in Shapes:** Students identify, sort, draw, and compare shapes based on their attributes and partition rectangles and circles into halves, thirds, and fourths. They move on to split circular analog clocks into quarters and halves to represent equal shares of 15 minute intervals, preparing them to tell time to the nearest five minutes. * **Measure and Compare Objects:** Students measure the side lengths of flat shapes and the edge lengths of solid shapes to develop understanding of shared and defining attributes of triangles, quadrilaterals, pentagons, hexagons, rectangular prisms, and cubes. * **Represent Data:** Students interpret time as represented on analog clock faces by connecting the clock face to a circular number line. They tell and write time from analog clock faces and from digital clocks to the nearest five minutes. * **Skip Counting to 100:** Students recognize that the numbers on an analog clock face represent five minute intervals and that they can skip count by five (forward and back) to tell time.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.G.1:** Students sort and identify examples and non- examples of triangles, quadrilaterals, pentagons, and hexagons based on their attributes — number of sides and corners of each type of shape. They identify solid shapes (cubes, prisms, cylinders, cones, and spheres) and describe their attributes — number of faces, shape of faces, flat faces with corners, or curved surfaces. * **2.G.3:** Students partition rectangles and circles into two, three, and four equal parts and describe the equal parts as *halves*, *thirds*, and *fourths/ quarters*. As they partition shapes into equal parts in different ways, students generalize that the parts have the same name and are the same size, even if their shapes are different. They continue partitioning shapes and describing halves, thirds, and quarters using the language *a half* *of*, *a third of*, and a *quarter of* or *fourth of*. Through the use of story problems involving food sharing, students recognize two halves, three thirds, and four fourths as one whole. * **2.MD.1:** Students use rulers to draw shapes with specified side lengths in inches and centimeters, understanding that shapes in the same category can look different. They measure the edge lengths of solid shapes, deepening their understanding of differences between flat shapes and solid shapes. * **2.MD.7:** Students tell and write time in five minute intervals from both analog clocks and digital clocks. They connect the analog clock face to a circular number line and tell time by skip counting by five or by using benchmark times. Students use the labels a.m. and p.m. They move on to explore calendars, recognizing different units of time (e.g., days, weeks, and months), and using relationships between those units (e.g., how many days are in a given month or how many weeks are in a year). * **2.NBT.2:** Students use skip counting by five (both counting forward and counting back) as they tell time from analog clocks to the nearest five minutes. |  |  |  |
| **Unit 7:** Adding and Subtracting Within 1,000  *Apply place value understanding of three-digit numbers with strategies of composing/decomposing and properties of operations to add and subtract within 1,000.* | * **Number Strategies:** Students use a variety of strategies to add and subtract within 1,000 including adding and subtracting by place (composing or decomposing a ten or a hundred as needed), using compensation, using the commutative or associative properties, and using the relationship between addition and subtraction. They use representations including base-ten blocks, place value charts, and drawings to compare and make connections between the different strategies, justifying why their chosen strategy works. * **Skip Counting to 100:** Students apply their understanding of place value and composition of three-digit numbers to add and subtract numbers within 1,000. They skip count by 10 and 100, noticing place value patterns in the count, and use these patterns to mentally add or subtract 10 and 100 within 1,000.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.NBT.1:** Students use a variety of Warm-Up routines (*True or False?*, *Choral Count*, *Which One Doesn’t Belong?*, and *How Many Do You See?*) to prepare them for adding and subtracting within 1,000. In these routines, they analyze equations and images involving decompositions of three-digit numbers into hundreds, tens, and ones. They also count from 800 to 990 by 10, looking for patterns in place value. * **2.NBT.2:** Students count on and count back by 10 and 100 from three-digit numbers to notice patterns and make connections between skip counting and place value. * **2.NBT.5:** Students use the *Number Talk* routine to find the values of addition expressions within 100 and to prepare them for adding within 1,000, continuing to develop their fluency with addition and subtraction within 100. * **2.NBT.6:** Students analyze and solve *Put Together/ Take Apart, Result Unknown* story problems with up to four two-digit addends. They apply the Associative Property of Addition when adding up to four addends as they strategically group numbers to add first. * **2.NBT.7:** Students use a variety of strategies to add and subtract within 1,000 including adding or subtracting by place (composing or decomposing a ten or a hundred as needed), using compensation, using the commutative or associative properties, and using the relationship between addition and subtraction. They use representations including base-ten blocks, place value charts, and drawings to compare and make connections between the different strategies, justifying why their chosen strategy works. * **2.NBT.7.1:** As students solve story problems involving addition or subtraction within 1,000, they use estimating strategies, such as rounding, to make reasonable estimates of the solutions before solving. After solving the problems, they use their estimates to help determine if their solutions are reasonable. * **2.NBT.8:** As students count on by 10 and 100 from three-digit numbers, they notice patterns and connections between skip counting and place value. They use these patterns to mentally add 10 or 100 to three-digit numbers. Later, students count back by 10 and 100 from three digit numbers to notice similar patterns. They use these patterns to mentally subtract 10 or 100 from three-digit numbers. * **2.NBT.9:** Students use a variety of addition and subtraction strategies to subtract within 1,000 — including composing tens or hundreds, decomposing, subtracting by place, and compensation. They explain why these strategies work using base-ten blocks as needed, drawings, place value reasoning, and properties of operations (Commutative and Associative Properties of Addition). * **2.OA.1:** Students solve a *Put Together/Result Unknown* story problem involving addition within 100 to help prepare them for solving story problems within 1,000. |  |  |  |
| **Unit 8:** Equal Groups  *Explore equal groups of objects and arrays, recognizing and identifying even and odd numbers. Measure and partition rectangles into rows and columns to connect them to arrays, gaining foundations for multiplication in Grade 3.* | * **Squares in an Array:** Students partition rectangles into equal-sized squares and interpret the partition as the rows and columns of an array. They use the structure of arrays to find the total number of objects arranged, including counting by one, skip counting, and first adding the total number of objects in each row or column before adding or skip counting by the number or rows or columns. * **Seeing Fractions in Shapes:** Students partition rectangles into equal-size squares as they connect them to arrays. * **Measure and Compare Objects:** Students estimate and measure the lengths and widths of rectangles using inch tiles, connecting rectangles to arrays. * **Number Strategies:** Students use a variety of counting and addition strategies to determine the number of objects arranged in an array. * **Skip Counting to 100:** Students look for patterns in even and odd numbers when skip counting by one, two, five, and ten. They use a variety of strategies, including skip counting, to determine the total number of objects arranged in an array.   For more information about how each Big Idea is developed throughout the grade, refer to the Keeping the Big Ideas at the Center ([pages xiv–xviii](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=12)) in the Teacher Edition. | * **2.G.2:** Students partition rectangles into a given number of rows and columns of equal-sized squares. They use the structure of arrays to find the total number of squares, preparing them for understanding area and multiplication in Grade 3. * **2.G.3:** Students partition rectangles into equal-size squares and interpret the partition as the rows and columns of an array. * **2.NBT.2:** Students recognize patterns in the sequence of odd and even numbers when counting by one, two, five, and ten. * **2.MD.1:** Students use inch tiles to measure the lengths and widths of rectangles, connecting arrays to rectangles to understand that rectangles can be composed of equal rows and equal columns. * **2.MD.3:** As students use inch tiles to measure the lengths and widths of rectangles, they first estimate the dimensions. * **2.OA.2:** Students demonstrate fluency with addition within 20 as they find the total number of objects arranged in arrays. * **2.OA.3:** Students use two-color counters to make two equal groups or groups of two, using the term *odd* to describe the number of counters when there is one left over and the term *even* when there are zero leftover. Students write equations to match representations of numbers, understanding that they can express an even number as the sum of two addends. They recognize patterns among even and odd numbers when counting by one, two, five, and ten, recognizing that they count even numbers as they skip count by two, starting at zero or another even number. * **2.OA.4:** Students use the structure of arrays to find the total number of objects arranged. They count by one, skip count, and first add the total number of objects in each row or column and then add or skip count by the number of rows or columns. Students write equations with equal addends to represent the total. |  |  |  |

1. In the third column, publishers/developers should show the organization of the program by showing how the content standards are mapped to each of the major conceptual ideas or Big Ideas used by the program.Publishers/developers should be aware of how major conceptual ideas develop from one grade to the next. For charts detailing the progression of the *Mathematics Framework*’s Big Ideas throughout the grade levels, see [chapter 6](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.cde.ca.gov%2Fci%2Fma%2Fcf%2Fdocuments%2Fmathfwchapter6.docx&wdOrigin=BROWSELINK) (TK–grade 2 and grades 3–5) and [chapter 7](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.cde.ca.gov%2Fci%2Fma%2Fcf%2Fdocuments%2Fmathfwchapter7.docx&wdOrigin=BROWSELINK) (grades 6–8).

State-adopted instructional materials help teachers to present and students to learn the content set forth in the *California Common Core State Standards for Mathematics with California Additions,* which include boththe content standards and the standards for mathematical practice (SMPs). Publishers/developers should use the following tables to provide page number citations or other references that demonstrate alignment with the SMPs and content standards.

### Standards for Mathematical Practice

To view the full alignment of Amplify Desmos Math California to each of the Standards for Mathematical Practice, refer to [pages xlix–li](https://learning.amplify.com/m/5df515fb21dce724/original/ADM-G2-TE-FM-V1-CA.pdf#page=47) in the Teacher Edition. Exemplar citations are provided in the following table.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met Yes** | **Met No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| MP.1 | Make sense of problems and persevere in solving them. | **Student Edition**   * [2.02 (Activity 1, Problems 1–3, pages 112–113)](https://learning.amplify.com/m/21a8871ce8846ac6/original/ADM-G2-U2-02-SE-lesson-answer-key-CA.pdf#page=1) * [2.15 (Activity 1, Problem 1, pages 206–207)](https://learning.amplify.com/m/3e39398d5cc17a14/original/ADM-G2-U2-15-SE-lesson-answer-key-CA.pdf#page=1) * [7.06 (Activity 1, Problems 1–2, pages 680–681)](https://learning.amplify.com/m/3e257dbef02acb0a/original/ADM-G2-U7-06-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [1.16 (Activity 2, entire Launch and Monitor, page 100–101)](https://learning.amplify.com/m/387b60eba530174d/original/ADM-G2-U1-16-TE-CA.pdf#page=6) * [2.02 (Activity 1, Differentiation | Teacher Moves, page 113A)](https://learning.amplify.com/m/2358e41b9bd7a6e8/original/ADM-G2-U2-02-TE-CA.pdf#page=5) * [2.15 (Activity 1, entire Launch and Connect, page 206–207)](https://learning.amplify.com/m/3a408fb6d1d57ebc/original/ADM-G2-U2-15-TE-CA.pdf#page=4) * [7.06 (Activity 1, entire Launch and Monitor, page 680–681)](https://learning.amplify.com/m/1846942a4822d861/original/ADM-G2-U7-06-TE-CA.pdf#page=4) |  |  |  |
| MP.2 | Reason abstractly and quantitatively. | **Student Edition**   * [2.13 (Activity 1, Problems 1–2, pages 192–193)](https://learning.amplify.com/m/2c1e2884b31ec968/original/ADM-G2-U2-13-SE-lesson-answer-key-CA.pdf#page=1) * [3.12 (Activity 1, Problems 1–2, pages 338–339)](https://learning.amplify.com/m/66abe893615c4827/original/ADM-G2-U3-12-SE-lesson-answer-key-CA.pdf#page=1) * [1.13 (Activity 1, Problems 1–2, pages 80–81)](https://learning.amplify.com/m/7b3a0054bd97323e/original/ADM-G2-U1-13-SE-lesson-CA.pdf#page=1)   **Teacher Edition**   * [3.12 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 338–339 and 339A)](https://learning.amplify.com/m/73c37d5ea09c046c/original/ADM-G2-U3-12-TE-CA.pdf#page=4) * [2.13 (Activity 1, entire Launch and Differentiation | Teacher Moves, pages 192–193 and 193A)](https://learning.amplify.com/m/136f6975ebcd6fad/original/ADM-G2-U2-13-TE-CA.pdf#page=4) * [1.13 (Activity 1, entire Connect, page 80–81)](https://learning.amplify.com/m/340b30020c56834e/original/ADM-G2-U1-13-TE-CA.pdf#page=4) |  |  |  |
| MP.3 | Construct viable arguments and critique the reasoning of others. | **Student Edition**   * [3.08 (Activity 2, Problem 5, page 313)](https://learning.amplify.com/m/4c6d4f9065587b7c/original/ADM-G2-U3-08-SE-lesson-answer-key-CA.pdf#page=3) * [2.11 (Activity 2, Problem 7, page 179)](https://learning.amplify.com/m/7cf0c0bb7b390b02/original/ADM-G2-U2-11-SE-lesson-answer-key-CA.pdf#page=4) * [5.07 (Activity 1, Problem 1, page 496)](https://learning.amplify.com/m/e8c71f3c335897c/original/ADM-G2-U5-07-SE-lesson-answer-key-CA.pdf) * [3.04 (Activity 2, Problem 5, page 287)](https://learning.amplify.com/m/7e292f596955e554/original/ADM-G2-U3-04-SE-lesson-answer-key-CA.pdf#page=4)   **Teacher Edition**   * [3.08 (Activity 2, entire Connect section, page 313A)](https://learning.amplify.com/m/5dbb2937136bd7c5/original/ADM-G2-U3-08-TE-CA.pdf#page=6) * [2.11 (Activity 2, Launch, MLR1: Stronger and Clearer Each Time, page 178–179)](https://learning.amplify.com/m/e4459f2ca4c5160/original/ADM-G2-U2-11-TE-CA.pdf#page=6) * [5.07 (Activity 1, entire Launch section, page 496)](https://learning.amplify.com/m/68543c790d39e575/original/ADM-G2-U5-07-TE-CA.pdf#page=4) * [3.04 (Activity 2, entire Connect section, page 286–287)](https://learning.amplify.com/m/427b727d7d6bd9f0/original/ADM-G2-U3-04-TE-CA.pdf#page=6) |  |  |  |
| MP.4 | Model with mathematics. | **Student Edition**   * [4.12 (Activity 2, Problems 3–6, pages 446–447)](https://learning.amplify.com/m/61f459907c2c0b0e/original/ADM-G2-U4-12-SE-lesson-answer-key-CA.pdf#page=3) * [1.12 (Activity 1, Problem 3, page 73)](https://learning.amplify.com/m/79313fd11a346108/original/ADM-G2-U1-12-SE-lesson-answer-key-CA.pdf#page=2) * [2.16 (Activity 1, Problems 2–3, page 214)](https://learning.amplify.com/m/572c71b005f4cef5/original/ADM-G2-U2-16-SE-lesson-answer-key-CA.pdf#page=2)   **Teacher Edition**   * [4.12 (Synthesis, page 448A](https://learning.amplify.com/m/3ecda155f0421cb0/original/ADM-G2-U4-12-TE-CA.pdf#page=8) and [Screen 9](https://teacher.desmos.com/activitybuilder/custom/68059c7d907aef8d9872e740?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c7c907aef8d9872d415#preview/804154aa-1969-46b3-b93b-c9c1406873cf)) * [1.12 (Activity 1, entire Launch section, page 72–73)](https://learning.amplify.com/m/194bbf9cfc5e76b2/original/ADM-G2-U1-12-TE-CA.pdf#page=4) * [2.16 (Activity 1, Differentiation | Teacher Moves, rows 2 and 3, page 213–214)](https://learning.amplify.com/m/2796b0b113106907/original/ADM-G2-U2-16-TE-CA.pdf#page=5) |  |  |  |
| MP.5 | Use appropriate tools strategically. | **Student Edition**   * [3.01 (Activity, Directions and “Ways to be a mathematician” Problems 1 and 2, page 269)](https://learning.amplify.com/m/6ae57291ef9bb9ea/original/ADM-G2-U3-01-SE-lesson-answer-key-CA.pdf#page=2) * [3.02 (Activity 2, Problems 4–7, page 272)](https://learning.amplify.com/m/2bd5018293559f0/original/ADM-G2-U3-02-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.01 (Activity, Sample Student Work, page 269B)](https://learning.amplify.com/m/4bbbda27410cca25/original/ADM-G2-U3-01-TE-CA.pdf#page=6) * [3.02 (Activity 2, entire Connect section and Differentiation | Teacher Moves, pages 272–273 and 273A)](https://learning.amplify.com/m/660cab3ff6ee769e/original/ADM-G2-U3-02-TE-CA.pdf#page=6)   **Centers Resources**   * Estimate and Measure (Stage 4, [Directions](https://learning.amplify.com/m/bd3bb0d343daa08/original/ADM-2-ctr-estimate-and-measure-s4-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/1392f888dedfb1c2/original/ADM-2-ctr-estimate-and-measure-s4-recording-sheet.pdf)) |  |  |  |
| MP.6 | Attend to precision. | **Student Edition**   * [3.01 (Activity, Directions, and “Ways to be a mathematician” problems 2 and 3, page 269)](https://learning.amplify.com/m/6ae57291ef9bb9ea/original/ADM-G2-U3-01-SE-lesson-answer-key-CA.pdf#page=2) * [4.02 (Activity 1, Problems 1–2, pages 374–375)](https://learning.amplify.com/m/4d3d90a6dc6c950/original/ADM-G2-U4-02-SE-lesson-answer-key-CA.pdf#page=1) * [3.15 (Activity 2, Problem 7, page 363)](https://learning.amplify.com/m/4017aae16bbdb3c/original/ADM-G2-U3-15-SE-lesson-answer-key-CA.pdf#page=4)   **Teacher Edition**   * [3.01 (Activity, entire Launch section and Connect section, page 269)](https://learning.amplify.com/m/4bbbda27410cca25/original/ADM-G2-U3-01-TE-CA.pdf#page=4) * [3.03 (Activity 1, Differentiation | Teacher Moves, page 277–278)](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=5) * [3.15 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 360–361 and 361A)](https://learning.amplify.com/m/5f8bc411323765ff/original/ADM-G2-U3-15-TE-CA.pdf#page=4) * [4.02 (Activity 1, entire Connect section, page 374–375)](https://learning.amplify.com/m/4e6c1cc1d61229b1/original/ADM-G2-U4-02-TE-CA.pdf#page=4)   **Centers Resources**   * Can You Draw It? (Stage 3, [Directions](https://learning.amplify.com/m/67630646d5369aea/original/ADM-2-ctr-can-you-draw-it-s3-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/294557412e6f8f02/original/ADM-2-ctr-can-you-draw-it-s3-recording-sheet.pdf), [Shape Cards](https://learning.amplify.com/m/3ecca1d8c721bb48/original/ADM-ctr-shape-cards-G2-pdf.pdf)) |  |  |  |
| MP.7 | Look for and make use of structure. | **Student Edition**   * [6.14 (Activity 1, Problems 1–6, pages 624–625)](https://dam.amplify.com/m/4bf7d8a562caf250/original/ADM-G2-U6-14-SE-lesson-answer-key-CA.pdf) * [8.09 (Activity 2, Screens 8–11)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d987427aa?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/3184d1bf-db86-46db-84cd-f764d4ebe8aa) * [7.02 (Activity 1, Screens 2–6)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873c606?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/287be1e9-b80f-4dd4-94de-42b08b482e22) * [1.05 (Activity 2, Problems 1–6, pages 29–30)](https://learning.amplify.com/m/9d5219f4f22b9ad/original/ADM-G2-U1-05-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [6.14 (Activity 1, Differentiation | Teacher Moves, page 625A)](https://learning.amplify.com/m/3b5f2e13ab201197/original/ADM-G2-U6-14-TE-CA.pdf#page=5) * [8.09 (entire Synthesis, page 841A)](https://learning.amplify.com/m/f029ae67074035e/original/ADM-G2-U8-09-TE-CA.pdf#page=8) * [7.02 (Activity 1, Differentiation | Teacher Moves, rows 2 and 3, page 653A)](https://learning.amplify.com/m/6b1674407658ad78/original/ADM-G2-U7-02-TE-CA.pdf#page=5) * [1.05 (Activity 2, Differentiation | Teacher Moves, page 29–30)](https://learning.amplify.com/m/9d919c0a6692304/original/ADM-G2-U1-05-TE-CA.pdf#page=7) |  |  |  |
| MP.8 | Look for and express regularity in repeated reasoning. | **Student Edition**   * [5.09 (Activities 1 and 2, Problems 6 and 13, pages 511–512)](https://learning.amplify.com/m/be58615f74311/original/ADM-G2-U5-09-SE-lesson-answer-key-CA.pdf#page=2) * [5.03 (Activity 1, Problems 1–10, pages 469–470)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=1) * [4.04 (Activity 2, Problems 3–9, pages 388–389)](https://learning.amplify.com/m/132ab25d88779f9b/original/ADM-G2-U4-04-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [5.09 (Activity 2, Differentiation | Teacher Moves, rows 2 and 3, page 512A)](https://learning.amplify.com/m/7df1efe66531077a/original/ADM-G2-U5-09-TE-CA.pdf#page=7) * [5.03 (Activity 1, Differentiation | Teacher Moves, page 469–470)](https://learning.amplify.com/m/7eb5de399e675726/original/ADM-G2-U5-03-TE-CA.pdf#page=5) |  |  |  |

## Grade-level Content Standards

### Domain: Operations and Algebraic Thinking

##### Cluster: Represent and solve problems involving addition and subtraction.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 1, 2, 4, and 7.

* In **Unit 1**, students use addition and subtraction to solve *Compare* story problems with unknowns in all positions. They represent the problems using tape diagrams and equations with a symbol for the unknown number.
* In **Unit 2**, students use addition and subtraction within 100 to solve *Add To/Take From, Put Together/Take Apart* and *Compare* story problems with unknowns in all positions. They represent the problems using tape diagrams and equations with a symbol for the unknown number.
* In **Unit 4**, students use addition and subtraction within 100 to solve *Add To/Take From, Put Together/Take Apart* and *Compare* story problems with unknowns in all positions. They represent the problems using number line drawings and equations with a symbol for the unknown number.
* In **Unit 7**, students solve a *Put Together/Result Unknown* story problem involving addition within 100 to help prepare them for solving story problems within 1,000.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 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*.* | **Student Edition**   * [2.07 (Activity 1, Problems 1–2, pages 148–149)](https://learning.amplify.com/m/37b792397301e3da/original/ADM-G2-U2-07-SE-lesson-answer-key-CA.pdf#page=1) * [1.16 (Activities 1 and 2, Problems 1–9, pages 98–101)](https://learning.amplify.com/m/1048c73c84dce5c1/original/ADM-G2-U1-16-SE-lesson-answer-key-CA.pdf#page=1) * [2.17 (Activities 1–2, Screens 4, 6, 7, and 9)](https://teacher.desmos.com/activitybuilder/custom/68059c74907aef8d987241ba?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c73907aef8d987229bc#preview/7b68388b-e647-4408-867c-c017384f7251) * [2.20 (Activity 2, Problems 3–5, pages 245–246)](https://learning.amplify.com/m/58785e3afba64e5e/original/ADM-G2-U2-20-SE-lesson-answer-key-CA.pdf#page=3) * [2.21 (Activity 1, Problem 1, page 250)](https://learning.amplify.com/m/6e9c303df9f5830b/original/ADM-G2-U2-21-SE-lesson-answer-key-CA.pdf#page=1) * [2.11 (Activity 1, Problems 1–2, pages 176–177)](https://learning.amplify.com/m/7cf0c0bb7b390b02/original/ADM-G2-U2-11-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [2.07 (Activity 1, Differentiation | Teacher Moves, rows 2–3, page 149A)](https://learning.amplify.com/m/798d7ce0eca3c385/original/ADM-G2-U2-07-TE-CA.pdf#page=5) * [2.21 (Activity 1, Differentiation | Teacher Moves, rows 2–3, page 251A)](https://learning.amplify.com/m/1362247df2bb4f62/original/ADM-G2-U2-21-TE-CA.pdf#page=5) * [2.17 (Activity 2, Connect, Key Takeaway, and Differentiation | Teacher Moves, pages 224–225 and 225A](https://learning.amplify.com/m/1d0c0943d64eb097/original/ADM-G2-U2-17-TE-CA.pdf#page=6) and [Screen 8](https://teacher.desmos.com/activitybuilder/custom/68059c74907aef8d987241ba?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c73907aef8d987229bc#preview/927d5572-5463-4128-9f76-279171dcffe4)) * [2.11 (Activity 1, entire Connect section, page 176–177)](https://learning.amplify.com/m/e4459f2ca4c5160/original/ADM-G2-U2-11-TE-CA.pdf#page=4) * [1.16 (Activity 1, Connect, Key Takeaway, page 98–99](https://learning.amplify.com/m/387b60eba530174d/original/ADM-G2-U1-16-TE-CA.pdf#page=4) and [Screen 5](https://teacher.desmos.com/activitybuilder/custom/68059c6f907aef8d9871e490?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c6e907aef8d9871ca02#preview/f187e327-2738-422b-a25c-2d9f03410e6a)) |  |  |  |

##### Cluster: Add and subtract within 20.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 1–3 and 8.

* In **Unit 1**, students begin the year adding and subtracting within 20, building toward fluency. They use counting techniques, making ten, decomposing addends and using known sums, and the relationship between addition and subtraction. They move away from manipulatives and toward mental strategies, including knowing sums from memory.
* In **Unit 2**, students use the *Number Talk* routine to build toward fluency with subtracting within 20.
* In **Unit 3**, students answer questions by fluently adding or subtracting within 20 as they interpret line plots that show measurement data.
* In **Unit 8**, students demonstrate fluency with addition within 20 as they find the total number of objects arranged in arrays.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.OA.2 | Fluently add and subtract within 20 using mental strategies.[[2]](#footnote-1) By end of Grade 2, know from memory all sums of two one-digit numbers. | *Fluently add and subtract within 20 using mental strategies.*  **Student Edition**   * [1.05 (Activity 2, Problems 1–6, pages 29–30)](https://learning.amplify.com/m/9d5219f4f22b9ad/original/ADM-G2-U1-05-SE-lesson-answer-key-CA.pdf#page=3) * [1.06 (Activity 2, Problems 1–8, pages 36–37)](https://learning.amplify.com/m/14b4496d2901c54e/original/ADM-G2-U1-06-SE-lesson-answer-key-CA.pdf#page=3) * [1.11 (Activity 2, Problems 2–3, page 68)](https://learning.amplify.com/m/29bed5a91870d0b5/original/ADM-G2-U1-11-SE-lesson-answer-key-CA.pdf#page=2)   **Teacher Edition**   * [1.05 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 29–30)](https://learning.amplify.com/m/9d919c0a6692304/original/ADM-G2-U1-05-TE-CA.pdf#page=7) * [1.06 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 37A)](https://learning.amplify.com/m/46656c2b1c0777a1/original/ADM-G2-U1-06-TE-CA.pdf#page=7) * [1.11 (Activity 2, Differentiation | Teacher Moves, row 3, page 68A)](https://learning.amplify.com/m/72438a2ac51a865b/original/ADM-G2-U1-11-TE-CA.pdf#page=7) * [1.03 (Actvitiy 2, entire Connect section and Differentiation | Teacher Moves, pages 15A and 15–16](https://learning.amplify.com/m/63affcbabcd3efd0/original/ADM-G2-U1-03-TE-CA.pdf#page=6) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c6e907aef8d9871cf11?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c6e907aef8d9871ca02#preview/27172e02-eb32-4d45-9d9c-d2668fcee992)   **Centers Resources**   * How Close? (Stage 1, [Directions](https://learning.amplify.com/m/238222328228e81/original/ADM-2-ctr-how-close-s1-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/3da4243678d1f738/original/ADM-2-ctr-how-close-s1-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) * How Close? (Stage 2, [Directions](https://learning.amplify.com/m/269eeed55db2845b/original/ADM-2-ctr-how-close-s2-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/159840aad6736407/original/ADM-2-ctr-how-close-s2-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) * Capture Squares (Stage 3, [Directions](https://learning.amplify.com/m/5c62b090c555168f/original/ADM-1-ctr-capture-squares-s3-directions.pdf), [Gameboard](https://learning.amplify.com/m/4663d253080851b4/original/ADM-1-ctr-capture-squares-s3-gameboard.pdf), [Spinner](https://learning.amplify.com/m/5ead8f419b4bddc5/original/ADM-1-ctr-capture-squares-s3-spinner.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) * Capture Squares (Stage 4, [Directions](https://learning.amplify.com/m/3ab0f1f6d3f091a4/original/ADM-1-ctr-capture-squares-s4-directions.pdf), [Gameboard](https://learning.amplify.com/m/3fae9034a4b65e93/original/ADM-1-ctr-capture-squares-s4-gameboard.pdf), [Spinner](https://learning.amplify.com/m/70924b1455188b5/original/ADM-1-ctr-capture-squares-s4-spinner.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf))   *By end of Grade 2, know from memory all sums of two one-digit numbers.*  **Student Edition**   * [1.03 (Activities 1–2, Screens 2, 6, 8)](https://teacher.desmos.com/activitybuilder/custom/68059c6e907aef8d9871cf11?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c6e907aef8d9871ca02#preview/f165e995-6e09-4d30-977e-ab546fed42c3)   **Teacher Edition**   * [1.03 (Activity 2, entire Connect section](https://learning.amplify.com/m/63affcbabcd3efd0/original/ADM-G2-U1-03-TE-CA.pdf#page=6) with [Screen 8,](https://teacher.desmos.com/activitybuilder/custom/68059c6e907aef8d9871cf11?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c6e907aef8d9871ca02#preview/27172e02-eb32-4d45-9d9c-d2668fcee992) [Differentiation | Teacher Moves,](https://learning.amplify.com/m/63affcbabcd3efd0/original/ADM-G2-U1-03-TE-CA.pdf#page=7) pages 15A and 15–16) * [1.03 (entire Synthesis, page 17A)](https://learning.amplify.com/m/63affcbabcd3efd0/original/ADM-G2-U1-03-TE-CA.pdf#page=8) * [1.05 (Warm-Up, “Students might say…”, page 27C)](https://learning.amplify.com/m/9d919c0a6692304/original/ADM-G2-U1-05-TE-CA.pdf#page=3) * [1.06 (Warm-Up, “Students might say…” section,](https://learning.amplify.com/m/46656c2b1c0777a1/original/ADM-G2-U1-06-TE-CA.pdf#page=1) and [Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c6e907aef8d9871d43a?collections=68059c6e907aef8d9871c951%2C68059c6e907aef8d9871ca02#preview/c12b99b0-fd8c-45ce-9eea-fb0f51179fa9) * How Close? (Stage 1, [Directions](https://learning.amplify.com/m/238222328228e81/original/ADM-2-ctr-how-close-s1-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/3da4243678d1f738/original/ADM-2-ctr-how-close-s1-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) * Capture Squares (Stage 3, [Directions](https://learning.amplify.com/m/5c62b090c555168f/original/ADM-1-ctr-capture-squares-s3-directions.pdf), [Gameboard](https://learning.amplify.com/m/4663d253080851b4/original/ADM-1-ctr-capture-squares-s3-gameboard.pdf), [Spinner](https://learning.amplify.com/m/5ead8f419b4bddc5/original/ADM-1-ctr-capture-squares-s3-spinner.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf))   **Fluency Practice**   * [Fluency Practice (Addition and Subtraction by Heart II: Addition ten frames, Addition place values, and Addition bars)](https://fluency.amplify.com/?decks=abh4,abh5,abh6) |  |  |  |

##### Cluster: Work with equal groups of objects to gain foundations for multiplication.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in **Unit 8**. Students use two-color counters to make two equal groups or groups of two, using the term *odd* to describe the number of counters when there is one left over and the term *even* when there are zero leftover. Students write equations to match representations of numbers, understanding that they can express an even number as the sum of two addends. They recognize patterns among even and odd numbers when counting by one, two, five, and ten, recognizing that they count even numbers as they skip count by two, starting at zero or another even number. Students use the structure of arrays to find the total number of objects arranged. They count by one, skip count, and first add the total number of objects in each row or column and then add or skip count by the number of rows or columns. Students write equations with equal addends to represent the total.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.OA.3 | Determine whether a group of objects (up to 20) has an odd or even number of members. | **Student Edition**   * [8.04 (Activities 1–2, Problems 5–11, pages 801–803)](https://learning.amplify.com/m/2be52b90fb241f15/original/ADM-G2-U8-04-SE-lesson-answer-key-CA.pdf#page=2) * [8.05 (Activity 2, Problems 3–4, 7, pages 809–810)](https://learning.amplify.com/m/33072899a2192496/original/ADM-G2-U8-05-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [8.04 (Activity 1, entire Connect section, page 800–801)](https://learning.amplify.com/m/671124c58d50ab07/original/ADM-G2-U8-04-TE-CA.pdf#page=4) * [8.04 (Activity 2, Differentiation | Teacher Moves, page 803A)](https://learning.amplify.com/m/671124c58d50ab07/original/ADM-G2-U8-04-TE-CA.pdf#page=7) * [8.04 (entire Synthesis section, page 804A)](https://learning.amplify.com/m/671124c58d50ab07/original/ADM-G2-U8-04-TE-CA.pdf#page=8) * [8.05 (entire Synthesis section, page 811A](https://learning.amplify.com/m/29b2909180fe4132/original/ADM-G2-U8-05-TE-CA.pdf#page=8) and [Screen 10)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d987422f3?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/59d71613-0045-4c1e-bf4f-7f7b8979fd27) |  |  |  |
| 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. | *Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns.*  **Student Edition**   * [8.08 (Activity 2, Problems 3–8, pages 832–833)](https://learning.amplify.com/m/7d19f9e830859fc4/original/ADM-G2-U8-08-SE-lesson-answer-key-CA.pdf#page=3) * [8.09 (Activity 2, Screens 8–11)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d987427aa?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/3184d1bf-db86-46db-84cd-f764d4ebe8aa) * [Unit 8 (Sub-Unit Summary, Sub-Unit 2, bullets 2–3)](https://learning.amplify.com/m/6238d82c8488347a/original/ADM-G2-U8-SUM-CA.pdf#page=2)   **Teacher Edition**   * [8.08 (Activity 2, entire Connect section, page 832–833)](https://learning.amplify.com/m/66a20c47caa82f0f/original/ADM-G2-U8-08-TE-CA.pdf#page=6) * [8.09 (Activity 2, Connect, Differentiation | Teacher Moves, row 3, pages 839A and 839–840)](https://learning.amplify.com/m/f029ae67074035e/original/ADM-G2-U8-09-TE-CA.pdf#page=6)   *Write an equation to express the total number of objects arranged in rectangular arrays as a sum of equal addends.*  **Student Edition**   * [8.10 (Activity 1, Problems 1–4, pages 844–845)](https://learning.amplify.com/m/2c9399cb52ec4c52/original/ADM-G2-U8-10-SE-lesson-answer-key-CA.pdf#page=1) * [8.11 (Activities 1–2, Problems 1–7, pages 850–853)](https://learning.amplify.com/m/144e15eeb83d3592/original/ADM-G2-U8-11-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * 8.10 [(entire Synthesis section page 847A](https://learning.amplify.com/m/7f37705402034428/original/ADM-G2-U8-10-TE-CA.pdf#page=8) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742a20?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/4873d5ee-19e6-492e-9442-d7fa4d51bcbf) * [8.10 (Activity 2, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 846–846A](https://learning.amplify.com/m/7f37705402034428/original/ADM-G2-U8-10-TE-CA.pdf#page=6) and [Screen 6](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742a20?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/7b1c1e4e-90c7-44a7-8b99-15d6dae4b7dd)) * [8.11 (Activity 1, entire Connect section, page 850–851)](https://learning.amplify.com/m/209ccdb93b411dab/original/ADM-G2-U8-11-TE-CA.pdf#page=4) |  |  |  |

### Domain: Number and Operations in Base Ten

##### Cluster: Understand place value.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 4–8.

* In **Unit 4**, students use the *Choral Count* routine to practice skip counting by five from zero to 100 and move on to use counting strategies — including skip counting by two, five, and ten — to represent an object’s movement from one point to another on a number line. They count on and count back to reason about the direction of the movement.
* In **Unit 5**, Students develop place value understanding of three-digit numbers by using base-ten blocks to show how the digits of a three-digit number are composed of a given amount of hundreds, tens, and ones. They understand “a hundred” as a unit by representing the amount using bundles of 10 tens, 100 ones, or a combination of tens and ones. Students use base-ten blocks to compose three-digit numbers that are multiples of 100 in different ways — using only tens, using only hundreds, and using a combination of tens and hundreds. They recognize that three-digit numbers that are multiples of 100 can be thought of as an amount of hundreds (with zero tens and zero ones). Students use skip counting by 10 and 100 to count a collection of base-ten blocks that represent a three-digit number. They skip count by 10 and 100 to find different ways to compose a three-digit number that is a multiple of 100. Students use place value charts and base-ten blocks to write three-digit numbers using base-ten numerals (standard form), number names (word form), and expanded form based on a given amount of hundreds, tens, and ones. They use base-ten blocks, number lines, and place value understanding to compare two three-digit numbers, recording the comparisons using the symbols <, =, and >. Students reason about the number of hundreds, tens, and ones by analyzing the digits of three-digit numbers. Students move on to order lists of more than two numbers.
* In **Unit 6**, students use skip counting by five (both counting forward and counting back) as they tell time from analog clocks to the nearest five minutes.
* In **Unit 7**, students use a variety of Warm-Up routines (*True or False?*, *Choral Count*, *Which One Doesn’t Belong?*, and *How Many Do You See?*) to prepare them for adding and subtracting within 1,000. In these routines, they analyze equations and images involving decompositions of three-digit numbers into hundreds, tens, and ones. They also count from 800 to 990 by 10, looking for patterns in place value. Students count on and count back by 10 and 100 from three-digit numbers to notice patterns and make connections between skip counting and place value.
* In **Unit 8**, students recognize patterns in the sequence of odd and even numbers when counting by one, two, five, and ten.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.NBT.1a | Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. Understand the following as a special case: 100 can be thought of as a bundle of ten tens—called a “hundred.” | *Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.*  **Student Edition**   * [5.05 (Activity 1, Screen 2)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987323f0?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/e2a5c962-1428-44e6-9b0c-86667f1f4019) * [5.09 (Activity 2, Problem 13, page 512)](https://learning.amplify.com/m/be58615f74311/original/ADM-G2-U5-09-SE-lesson-answer-key-CA.pdf#page=3) * [5.03 (Activity 1, Problems 2–8, 10, pages 469–470)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [5.04 (Activity 2, entire Connect section, page 478](https://learning.amplify.com/m/31852bcf22d1f432/original/ADM-G2-U5-04-TE-CA.pdf#page=6) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987321cd?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/a8d58bbf-604d-42a6-84d9-79adc669e668) * [5.09 (Activity 2, Connect, Key Takeaway, page 512)](https://learning.amplify.com/m/7df1efe66531077a/original/ADM-G2-U5-09-TE-CA.pdf#page=6)   *Understand the following as a special case: 100 can be thought of as a bundle of ten tens — called a “hundred.*  **Student Edition**   * [5.02 (Activities 1–2, Problems 1–4, pages 464–465)](https://learning.amplify.com/m/7d40d9df517132c6/original/ADM-G2-U5-02-SE-lesson-answer-key-CA.pdf#page=1) * [5.03 (Activity 2, Problems 11–14, pages 471–472)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition:**   * [5.02 (Activity 1, entire Connect section](https://learning.amplify.com/m/53f46c8a9de8c9a4/original/ADM-G2-U5-02-TE-CA.pdf#page=4) with [Screen 5](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d98731f43?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/7f11db5f-17c3-42b0-ae3e-d453d364fbcf), page 464) * [5.02 (entire Synthesis section](https://learning.amplify.com/m/53f46c8a9de8c9a4/original/ADM-G2-U5-02-TE-CA.pdf#page=8) with [Screen 9](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d98731f43?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/2c83e060-efbf-4f6d-b165-fc088d90e2fe), page 466A) * [5.02 (Activity 2, entire Connect section, Differentiation | Teacher Moves, rows 2–3, page 465A and 465)](https://learning.amplify.com/m/53f46c8a9de8c9a4/original/ADM-G2-U5-02-TE-CA.pdf#page=6) |  |  |  |
| 2.NBT.1b | Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. Understand the following as a special case: 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). | *Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.*  **Student Edition**   * [5.05 (Activity 1, Screen 2)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987323f0?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/e2a5c962-1428-44e6-9b0c-86667f1f4019) * [5.09 (Activity 2, Problem 13, page 512)](https://learning.amplify.com/m/be58615f74311/original/ADM-G2-U5-09-SE-lesson-answer-key-CA.pdf#page=3) * [5.03 (Activity 1, Problems 2–8, 10, pages 469–470)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [5.04 (Activity 2, entire Connect section, page 478](https://learning.amplify.com/m/31852bcf22d1f432/original/ADM-G2-U5-04-TE-CA.pdf#page=6) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987321cd?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/a8d58bbf-604d-42a6-84d9-79adc669e668) * [5.09 (Activity 2, Connect, Key Takeaway, page 512)](https://learning.amplify.com/m/7df1efe66531077a/original/ADM-G2-U5-09-TE-CA.pdf#page=6)   *Understand the following as a special case: 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).*  **Student Edition**   * [5.03 (Activity 1, Problems 2–8, 10, pages 469–470)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=1) * [5.03 (Activity 2, Problems 11–14, pages 471–472)](https://learning.amplify.com/m/3aa9afbd21925032/original/ADM-G2-U5-03-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [5.03 (Activity 1, entire Connect section, page 469D)](https://learning.amplify.com/m/7eb5de399e675726/original/ADM-G2-U5-03-TE-CA.pdf#page=4) * [5.03 (Activity 2, Differentiation | Teacher Moves, row 3, page 471–472)](https://learning.amplify.com/m/7eb5de399e675726/original/ADM-G2-U5-03-TE-CA.pdf#page=7) |  |  |  |
| 2.NBT.2 | Count within 1000; skip-count by 2s, 5s, 10s, and 100s. | **Student Edition**   * [4.06 (Activity 1, Screens 2–4, 6–9)](https://teacher.desmos.com/activitybuilder/custom/68059c7c907aef8d9872dea2?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c7c907aef8d9872d415#preview/e77360c9-35cf-4273-a9c6-a70e97413cf4) * [7.02 (Activity 1, Screens 2–5)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873c606?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/287be1e9-b80f-4dd4-94de-42b08b482e22) * [4.09 (Activity 1, Problem 1, page 423)](https://learning.amplify.com/m/6ecea0e149a8ba3b/original/ADM-G2-U4-09-SE-lesson-answer-key-CA.pdf#page=1) * [7.09 (Activity 1, Screens 4–5)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873cfac?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/1c602445-20ef-438a-9022-20df5dc8a07b)   **Teacher Edition**   * [4.06 (Activity 1, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 402–403 and 403A)](https://learning.amplify.com/m/3f131b6ce282cd0f/original/ADM-G2-U4-06-TE-CA.pdf#page=4) * [4.06 (Activity 2, entire Connect section, page 404–405)](https://learning.amplify.com/m/3f131b6ce282cd0f/original/ADM-G2-U4-06-TE-CA.pdf#page=6) * [4.09 (Activity 1, Differentiation | Teacher Moves, row 3, Differentiation | Teacher Moves, page 423–424)](https://learning.amplify.com/m/550c2a667b5f552e/original/ADM-G2-U4-09-TE-CA.pdf#page=5) * [7.02 (Activity 1, Connect, Key Takeaway, and Differentiation | Teacher Moves, rows 2 and 3, pages 652-653 and 653A)](https://learning.amplify.com/m/6b1674407658ad78/original/ADM-G2-U7-02-TE-CA.pdf#page=4) * [7.09 (Activity 1, Connect, Key Takeaway, and Differentiation | Teacher Moves, rows 2 and 3 page 702-703 and 703A)](https://learning.amplify.com/m/5149d3527b842757/original/ADM-G2-U7-09-TE-CA.pdf#page=4)   **Centers Resources**   * Number Line Scoot (Stage 1, [Directions](https://learning.amplify.com/m/2c3750c49d2b2d6f/original/ADM-2-ctr-number-line-scoot-s1-directions.pdf), [Gameboard](https://learning.amplify.com/m/43fbb899b76bc25e/original/ADM-2-ctr-number-line-scoot-s1-gameboard.pdf), [Spinner](https://learning.amplify.com/m/1e910594e9c586ce/original/ADM-2-ctr-number-line-scoot-s1-spinner.pdf)) * Last Number Wins (Stage 4, [Directions](https://learning.amplify.com/m/42247c3b9268643a/original/ADM-2-ctr-last-number-wins-s4-directions.pdf), [Gameboard](https://learning.amplify.com/m/1eb692821396c4a8/original/ADM-2-ctr-last-number-wins-s4-gameboard.pdf)) |  |  |  |
| 2.NBT.3 | Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. | *Read and write numbers to 1000 using base-ten numerals.*  **Student Edition**   * [5.05 (Activities 1–2, Screens 2–7)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987323f0?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/e2a5c962-1428-44e6-9b0c-86667f1f4019) * [5.06 (Activity 1, Problem 1, page 489)](https://learning.amplify.com/m/c23716de5129b38/original/ADM-G2-U5-06-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [5.05 (Activity 1, entire Monitor section, page 482–483)](https://learning.amplify.com/m/2ce9e9260304115/original/ADM-G2-U5-05-TE-CA.pdf#page=4) * [5.05 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 485A)](https://learning.amplify.com/m/2ce9e9260304115/original/ADM-G2-U5-05-TE-CA.pdf#page=7) * [5.06 (Activity 1, entire Connect section, page 489D)](https://learning.amplify.com/m/34ae85798aca81ba/original/ADM-G2-U5-06-TE-CA.pdf#page=4)   *Read and write numbers to 1000 using number names.*  **Student Edition**   * [5.07 (Activity 2, Problems 2–7, page 497)](https://learning.amplify.com/m/e8c71f3c335897c/original/ADM-G2-U5-07-SE-lesson-answer-key-CA.pdf#page=2)   **Teacher Edition**   * [5.07 (Activity 1, entire Connect section, page 496](https://learning.amplify.com/m/68543c790d39e575/original/ADM-G2-U5-07-TE-CA.pdf#page=4) and [Screen 3)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d9873282c?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/a838cb89-ecb1-4f93-87b2-43318aa6d291) * [5.07 (Activity 2, entire Connect section and Differentiation | Teacher Moves rows 2–3, pages 497A and 497)](https://learning.amplify.com/m/68543c790d39e575/original/ADM-G2-U5-07-TE-CA.pdf#page=6)   *Read and write numbers to 1000 using expanded form.*  **Student Edition**   * [5.06 (Activity 1, Problem 1, page 489)](https://learning.amplify.com/m/c23716de5129b38/original/ADM-G2-U5-06-SE-lesson-answer-key-CA.pdf#page=1) * [5.06 (Activity 2, Problems 3–4, pages 491–492)](https://learning.amplify.com/m/c23716de5129b38/original/ADM-G2-U5-06-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [5.06 (Activity 1, entire Connect section, page 489D](https://learning.amplify.com/m/34ae85798aca81ba/original/ADM-G2-U5-06-TE-CA.pdf#page=4) and [Screen 5)](https://teacher.desmos.com/activitybuilder/custom/68059c80907aef8d987326f2?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c80907aef8d98731b19#preview/a902425c-b6f5-4a7f-8bac-e524f7973daf) * [5.06 (Activity 2, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 491A and 491–492)](https://learning.amplify.com/m/34ae85798aca81ba/original/ADM-G2-U5-06-TE-CA.pdf#page=6) |  |  |  |
| 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. | **Student Edition**   * [5.09 (Activities 1–2, Problems 2–12, pages 510–512)](https://learning.amplify.com/m/be58615f74311/original/ADM-G2-U5-09-SE-lesson-answer-key-CA.pdf#page=1) * [5.10 (Activity 1, Problems 1–5, page 516)](https://learning.amplify.com/m/3122ed6af7f4880f/original/ADM-G2-U5-10-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [5.09 (Activity 1, entire Connect section and Differentiation | Teacher Moves table, pages 510–511 and 511A)](https://learning.amplify.com/m/7df1efe66531077a/original/ADM-G2-U5-09-TE-CA.pdf#page=4) * [5.09 (Activity 2, entire Connect section and Differentiation | Teacher Moves table, pages 512 and 512A)](https://learning.amplify.com/m/7df1efe66531077a/original/ADM-G2-U5-09-TE-CA.pdf#page=6) * [5.10 (Activity 1, entire Connect section, page 516)](https://learning.amplify.com/m/470d1f2c744acdf7/original/ADM-G2-U5-10-TE-CA.pdf#page=4)   **Centers Resources**   * Greatest of Them All (Stage 2, [Recording Sheet](https://learning.amplify.com/m/3309f407adc63ab5/original/ADM-2-ctr-greatest-of-them-all-s2-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) |  |  |  |

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##### Cluster: Use place value understanding and properties of operations to add and subtract.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 1–5 and 7.

* In **Unit 1**, students work toward fluency with adding and subtracting within 100 as they solve *Compare* story problems. They use a variety of strategies, including reasoning about place value and using the relationship between addition and subtraction.
* In **Unit 2**, students work toward fluency with adding and subtracting within 100 as they solve story problems and find the total values of groups of mixed coins or bills. They use a variety of strategies, including counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction. As students find the total values of groups of mixed coins or bills, they add two-digit numbers using a variety of strategies, including skip counting, place value reasoning, and properties of operations (adding in any order). They further apply these strategies to solve a variety of two-step story problems. Before solving *Compare* story problems involving addition and subtraction within 100, students estimate the values of the unknown amounts and justify their estimates. They use a variety of efficient subtraction strategies to subtract within 100 — including composing a ten, decomposing, and compensation. Students explain why these strategies work using base-ten blocks, drawings and tape diagrams, place value reasoning, and properties of operations (emphasizing the relationship between addition and subtraction).
* In **Unit 3**, Students work toward fluency with adding and subtracting within 100 as they solve one- and two-step story problems (*Compare*, *Add To/Take From*, and *Put Together/Take Apart*) involving length measures. They use a variety of computation strategies, counting on or skip counting, reasoning about place value, composing and decomposing, using compensation, and using the relationship between addition and subtraction.
* In **Unit 4**, students work toward fluency with adding and subtracting within 100 as they solve story problems (*Add To/Take From, Put Together/Take Apart* and *Compare*). They connect the operations to movements along the number line. Students count on/back and decompose while representing each part with a jump along the number line. They compare number lines to other representations (e.g., base-ten blocks). Within the context of plants growing in a row that is modeled by a number line, students estimate where plants are located and then justify the reasonableness of their estimate.
* In **Unit 5**, students use the *True or False?* and *Number Talk* routines to find the values of addition expressions within 100 and to evaluate comparison statements within 100, continuing to develop their fluency with addition and subtraction within 100.
* In **Unit 7**, students use the *Number Talk* routine to find the values of addition expressions within 100 and to prepare them for adding within 1,000, continuing to develop their fluency with addition and subtraction within 100. They analyze and solve *Put Together/ Take Apart, Result Unknown* story problems with up to four two-digit addends. Students apply the Associative Property of Addition when adding up to four addends as they strategically group numbers to add first. They use a variety of strategies to add and subtract within 1,000 including adding or subtracting by place (composing or decomposing a ten or a hundred as needed), using compensation, using the commutative or associative properties, and using the relationship between addition and subtraction. Students use representations including base-ten blocks, place value charts, and drawings to compare and make connections between the different strategies, justifying why their chosen strategy works. As they solve story problems involving addition or subtraction within 1,000, they use estimating strategies, such as rounding, to make reasonable estimates of the solutions before solving. After solving the problems, they use their estimates to help determine if their solutions are reasonable. As students count on by 10 and 100 from three-digit numbers, they notice patterns and connections between skip counting and place value. They use these patterns to mentally add 10 or 100 to three-digit numbers. Later, students count back by 10 and 100 from three-digit numbers to notice similar patterns. They use these patterns to mentally subtract 10 or 100 from three-digit numbers. Students use a variety of addition and subtraction strategies to subtract within 1,000 — including composing tens or hundreds, decomposing, subtracting by place, and compensation. They explain why these strategies work using base-ten blocks as needed, drawings, place value reasoning, and properties of operations (Commutative and Associative Properties of Addition).

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 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. | *Fluently add and subtract within 100.*  **Student Edition**   * [2.21 (Activities 1–2 Problems 1 and 4, pages 250 and 253)](https://learning.amplify.com/m/6e9c303df9f5830b/original/ADM-G2-U2-21-SE-lesson-answer-key-CA.pdf#page=1) * [3.12 (Activities 1–2, Problems 1–3, pages 338–340)](https://learning.amplify.com/m/66abe893615c4827/original/ADM-G2-U3-12-SE-lesson-answer-key-CA.pdf#page=1) * [Unit 2 (Sub-Unit Summary, Sub-Unit 4, bullets 2–3, page 264A)](https://learning.amplify.com/m/66d1c0fc4a357a68/original/ADM-G2-U2-SUM-CA.pdf#page=4)   **Teacher Edition**   * [2.21 (Activity 1, Differentiation | Teacher Moves, page 251A)](https://learning.amplify.com/m/1362247df2bb4f62/original/ADM-G2-U2-21-TE-CA.pdf#page=5) * [3.12 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 338–339 and 339A)](https://learning.amplify.com/m/73c37d5ea09c046c/original/ADM-G2-U3-12-TE-CA.pdf#page=4)   *Fluently add within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.*  **Student Edition**   * [2.12 (Activity 1, Problems 1–5, pages 183–184)](https://learning.amplify.com/m/51c0ceadf4efec56/original/ADM-G2-U2-12-SE-lesson-answer-key-CA.pdf#page=1) * [2.21 (Activity 2, Problem 3, page 252)](https://learning.amplify.com/m/6e9c303df9f5830b/original/ADM-G2-U2-21-SE-lesson-answer-key-CA.pdf#page=3) * [3.12 (Activity 2, Problem 4, page 341)](https://learning.amplify.com/m/66abe893615c4827/original/ADM-G2-U3-12-SE-lesson-answer-key-CA.pdf#page=4) * [2.03 (Activities 1–2, Problems 1–8, pages 119–122)](https://learning.amplify.com/m/6ba020d6e312d2cb/original/ADM-G2-U2-03-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [2.12 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 183D and 183–184)](https://learning.amplify.com/m/5408b947dabef1c1/original/ADM-G2-U2-12-TE-CA.pdf#page=4) * [2.21 (Activity 2, entire Connect section and Differentiation | Teacher Moves, pages 252–253 and 253A)](https://learning.amplify.com/m/1362247df2bb4f62/original/ADM-G2-U2-21-TE-CA.pdf#page=6) * [3.12 (Activity 2, Differentiation | Teacher Moves, page 341A)](https://learning.amplify.com/m/73c37d5ea09c046c/original/ADM-G2-U3-12-TE-CA.pdf#page=7) * [2.03 (Activity 2, entire Connect section and Differentiation | Teacher Moves, pages 121A and 121–122)](https://learning.amplify.com/m/4a5be77cd60c8256/original/ADM-G2-U2-03-TE-CA.pdf#page=6)   *Fluently subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.*  **Student Edition**   * [2.09 (Activity 1, Problems 1–3, pages 162–163)](https://learning.amplify.com/m/23df69d9839ca183/original/ADM-G2-U2-09-SE-lesson-answer-key-CA.pdf#page=1) * [2.11 (Activities 1–2, Problems 1–7, pages 176–179)](https://learning.amplify.com/m/7cf0c0bb7b390b02/original/ADM-G2-U2-11-SE-lesson-answer-key-CA.pdf#page=1) * [2.11 (Warm-Up, Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c74907aef8d98723aaf?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c73907aef8d987229bc#preview/86a18623-18df-43a4-a245-31b15e29ee43) * [7.19 (Activity: Exploring Operations, Problem 1)](https://learning.amplify.com/m/76e8b9885b7910dc/original/ADM-2-7-19-Additional-Activity-SE-Answers-On-CA.pdf#page=1)   **Teacher Edition**   * [2.09 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 162–163 and 163A)](https://learning.amplify.com/m/2496f87bd1b8a6c0/original/ADM-G2-U2-09-TE-CA.pdf#page=4) * [2.11 (Activity 1, entire Connect section, page 176–177)](https://learning.amplify.com/m/e4459f2ca4c5160/original/ADM-G2-U2-11-TE-CA.pdf#page=4) * [2.11 (Activity 2, Connect and Differentiation | Teacher Moves, pages 178-179 and 179A)](https://learning.amplify.com/m/e4459f2ca4c5160/original/ADM-G2-U2-11-TE-CA.pdf#page=6) * [2.11 (Warm-Up, entire Connect section and “Students Might Say…,” page 176C)](https://learning.amplify.com/m/e4459f2ca4c5160/original/ADM-G2-U2-11-TE-CA.pdf#page=3) |  |  |  |
| 2.NBT.6 | Add up to four two-digit numbers using strategies based on place value and properties of operations. | **Student Edition**   * [7.16 (Activity 2, Problems 1–4, pages 754–755)](https://learning.amplify.com/m/1c080fd046908b0f/original/ADM-G2-U7-16-SE-lesson-CA.pdf#page=3) * [2.22 (Activity 2, Problems 5–6, pages 259–260)](https://learning.amplify.com/m/6ac593b5bbaf0bd2/original/ADM-G2-U2-22-SE-lesson-answer-key-CA.pdf#page=3) * [7.19 (Activity: Exploring Operations, Problems 2–3)](https://learning.amplify.com/m/76e8b9885b7910dc/original/ADM-2-7-19-Additional-Activity-SE-Answers-On-CA.pdf#page=2)   **Teacher Edition**   * [7.16 (Activity 2, entire Connect section, page 754–755)](https://learning.amplify.com/m/136f08c081140d9e/original/ADM-G2-U7-16-TE-CA.pdf#page=6) * [7.16 (entire Synthesis section, page 756A](https://learning.amplify.com/m/136f08c081140d9e/original/ADM-G2-U7-16-TE-CA.pdf#page=8) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c89907aef8d9873da9e?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/0c3bebef-7f37-4f87-b6c0-784374cfc563) * [2.22 (Activity 2, Connect and Differentiation | Teacher Moves, pages 259A and 259–260)](https://learning.amplify.com/m/2a29ace10a5913f/original/ADM-G2-U2-22-TE-CA.pdf#page=6) * [7.16 (Warm-Up, Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c89907aef8d9873da9e?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/21fe033a-5b7b-4df3-aa78-1c03b8b29d3f)   **Centers Resources**   * Greatest of Them All (Stage 3, [Directions](https://learning.amplify.com/m/69e8dac97f9ea29f/original/ADM-2-ctr-greatest-of-them-all-s3-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/32cd797b9be37bd1/original/ADM-2-ctr-greatest-of-them-all-s3-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) |  |  |  |
| 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. | *Add and subtract within 1000, using concrete models or drawings strategies based on place value, strategies based on properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method.*  **Student Edition**   * [7.05 (Activities 1–2, Problems 1, 4–5, and 11, pages 673–674 and 676)](https://learning.amplify.com/m/26254da5c6d754d3/original/ADM-G2-U7-05-SE-lesson-answer-key-CA.pdf#page=1) * [7.13 (Activity 1, Problems 2, 4, and 6, pages 730–731)](https://learning.amplify.com/m/553d7a36f75da976/original/ADM-G2-U7-13-SE-lesson-answer-key-CA.pdf#page=1) * [7.18 (Activity 1, Problems 1–5, pages 766–767)](https://learning.amplify.com/m/59a3d47af0104c44/original/ADM-G2-U7-18-SE-lesson-answer-key-CA.pdf#page=1) * [7.07 (Activity 2, Problem 3–4, pages 689–690)](https://learning.amplify.com/m/1cb4931ec4b20374/original/ADM-G2-U7-07-SE-lesson-answer-key-CA.pdf#page=3) * [7.15 (Activities 1–2, Problems 1–6, pages 743–746)](https://learning.amplify.com/m/2fe62805118a28ee/original/ADM-G2-U7-15-SE-lesson-answer-key-CA.pdf#page=1) * [7.19 (Activity: Exploring Operations, Problems 4–5)](https://learning.amplify.com/m/76e8b9885b7910dc/original/ADM-2-7-19-Additional-Activity-SE-Answers-On-CA.pdf#page=3)   **Teacher Edition**   * [7.05 (Activity 1, Differentiation | Teacher Moves, page 673–674)](https://learning.amplify.com/m/30335a292b35c178/original/ADM-G2-U7-05-TE-CA.pdf#page=5) * [7.15 (Activity 1, Connect, page 743D)](https://learning.amplify.com/m/4b2e4bcfb2115bab/original/ADM-G2-U7-15-TE-CA.pdf#page=4) * [7.07 (Activity 2, Connect, Key Takeaway, Differentiation | Teacher Moves, pages 689A and 689–690)](https://learning.amplify.com/m/72db07f4eaac01f9/original/ADM-G2-U7-07-TE-CA.pdf#page=6) * [7.18 (Activity 1, Differentiation | Teacher Moves, page 767A)](https://learning.amplify.com/m/790de3b75b6bf66/original/ADM-G2-U7-18-TE-CA.pdf#page=5) * [7.15 (Activity 2, Differentiation | Teacher Moves, page 745–746)](https://learning.amplify.com/m/4b2e4bcfb2115bab/original/ADM-G2-U7-15-TE-CA.pdf#page=7)   **Centers Resources**   * Target Numbers (Stage 6, [Directions](https://learning.amplify.com/m/3509ff0e78636067/original/ADM-2-ctr-target-numbers-s6-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/75d8666e2ba3be13/original/ADM-2-ctr-target-numbers-s6-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf)) * Target Numbers (Stage 7, [Directions](https://learning.amplify.com/m/1d4e34674a935fdf/original/ADM-2-ctr-target-numbers-s7-directions.pdf), [Recording Sheet](https://learning.amplify.com/m/b18afdc5dc1add2/original/ADM-2-ctr-target-numbers-s7-recording-sheet.pdf), [Number Cards](https://learning.amplify.com/m/1cb00b56c961f3cd/original/ADM-ctr-number-cards-0-10.pdf))   *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.*  **Student Edition**   * [7.13 (Activities 1–2, Problems 2, 4, 6–8, pages 730–732)](https://learning.amplify.com/m/553d7a36f75da976/original/ADM-G2-U7-13-SE-lesson-answer-key-CA.pdf#page=1) * [7.07 (Activity 2, Problem 3, 4, pages 689–690)](https://learning.amplify.com/m/1cb4931ec4b20374/original/ADM-G2-U7-07-SE-lesson-answer-key-CA.pdf#page=3) * [7.05 (Activities 1–2, Problems 1, 2, 4, 5, and 8–11, pages 673–676)](https://learning.amplify.com/m/26254da5c6d754d3/original/ADM-G2-U7-05-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [7.13 (Activity 1, Differentiation | Teacher Moves, page 731A)](https://learning.amplify.com/m/41fdb6f658ddeeff/original/ADM-G2-U7-13-TE-CA.pdf#page=5) * [7.13 (Activity 2, entire Connect section, page 732](https://learning.amplify.com/m/41fdb6f658ddeeff/original/ADM-G2-U7-13-TE-CA.pdf#page=6) and [Screen 7)](https://teacher.desmos.com/activitybuilder/custom/68059c89907aef8d9873d700?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/afdd4d86-9182-402c-b793-c94500e86c8a) * [7.05 (Activity 1, entire Connect section, page 673D](https://learning.amplify.com/m/30335a292b35c178/original/ADM-G2-U7-05-TE-CA.pdf#page=4) and [Screen 5)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873caab?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/d09ef8c7-581f-4a58-bd73-91160cae7433) * [7.05 (Activity 2, entire Connect section, page 675A)](https://learning.amplify.com/m/30335a292b35c178/original/ADM-G2-U7-05-TE-CA.pdf#page=6) |  |  |  |
| 2.NBT.7.1 | Use estimation strategies to make reasonable estimates in problem solving | **Student Edition**   * [7.19 (Activities 1–2, Problems 1–8, 10, 11, and 13, pages 773–776)](https://learning.amplify.com/m/2a8c9f09617e1ba/original/ADM-G2-U7-19-SE-lesson-answer-key-CA.pdf#page=1) * [7.08 (Activity 2, Problems 1–2, page 696)](https://learning.amplify.com/m/1c58511c28f64796/original/ADM-G2-U7-08-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [7.19 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 773D and 773–774)](https://learning.amplify.com/m/fa86333b83a4353/original/ADM-G2-U7-19-TE-CA.pdf#page=4) * [7.19 (Activity 2, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 775A and 775–776)](https://learning.amplify.com/m/fa86333b83a4353/original/ADM-G2-U7-19-TE-CA.pdf#page=6) * [7.08 (Activity 2, Connect, beginning with “Use the Think-Pair-Share routine”, page 696–697)](https://learning.amplify.com/m/653556e19ded83c5/original/ADM-G2-U7-08-TE-CA.pdf#page=6) |  |  |  |
| 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. | *Mentally add 10 or 100 to a given number 100–900.*  **Student Edition**   * [7.02 (Activity 1, Screens 2–5)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873c606?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/287be1e9-b80f-4dd4-94de-42b08b482e22)   **Teacher Edition**   * [7.02 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 652–653 and 653A)](https://learning.amplify.com/m/6b1674407658ad78/original/ADM-G2-U7-02-TE-CA.pdf#page=4) * [7.02 (Activity 2, entire Connect section and Differentiation | Teacher Moves, row 3, pages 654–655 and 655A](https://learning.amplify.com/m/6b1674407658ad78/original/ADM-G2-U7-02-TE-CA.pdf#page=6) and [Screen 9)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873c606?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/29c47d25-ec71-4086-b47c-70eb4f31c977)   *Mentally subtract 10 or 100 to a given number 100–900.*  **Student Edition**   * [7.09 (Activity 1, Screens 2–5)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873cfac?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/d6c1c33a-05d8-46e6-8962-17d75a19bf73)   **Teacher Edition**   * [7.09 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 702–703 and 703A)](https://learning.amplify.com/m/5149d3527b842757/original/ADM-G2-U7-09-TE-CA.pdf#page=4) * [7.09 (Activity 2, entire Connect section, and Differentiation | Teacher Moves, row 3, pages 704–705 and 705A](https://learning.amplify.com/m/5149d3527b842757/original/ADM-G2-U7-09-TE-CA.pdf#page=6) and [Screen 9)](https://teacher.desmos.com/activitybuilder/custom/68059c88907aef8d9873cfac?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c88907aef8d9873c301#preview/86b28ffc-e4c6-4b8b-9b54-e17d79611f45) |  |  |  |
| 2.NBT.9 | Explain why addition and subtraction strategies work, using place value and the properties of operations.[[3]](#footnote-2) | **Student Edition**   * [7.07 (Activities 1–2, Problems 1 and 3, pages 687 and 689)](https://learning.amplify.com/m/1cb4931ec4b20374/original/ADM-G2-U7-07-SE-lesson-answer-key-CA.pdf#page=1) * [7.16 (Activity 2, Problems 1– 4, pages 754–755)](https://learning.amplify.com/m/644180df17dbde96/original/ADM-G2-U7-16-SE-lesson-answer-key-CA.pdf#page=3) * [7.19 (Activity: Exploring Operations, Problems 1–2)](https://learning.amplify.com/m/76e8b9885b7910dc/original/ADM-2-7-19-Additional-Activity-SE-Answers-On-CA.pdf#page=1)   **Teacher Edition**   * [2.10 (Activity 1, entire Connect section, Page 169D)](https://learning.amplify.com/m/3aa952d25d2bf90/original/ADM-G2-U2-10-TE-CA.pdf#page=4) * [7.07 (Activity 2, entire Connect section and Differentiation | Teacher Moves, pages 689A and 689–690)](https://learning.amplify.com/m/72db07f4eaac01f9/original/ADM-G2-U7-07-TE-CA.pdf#page=6) * [7.16 (Activity 2, entire Connect section, Differentiation | Teacher Moves rows 2 and 3, pages 754–755 and 755A)](https://learning.amplify.com/m/136f08c081140d9e/original/ADM-G2-U7-16-TE-CA.pdf#page=6) * [2.21 (Activity 2, Connect, Think-Pair-Share, and Key Takeaway, page 252–253)](https://learning.amplify.com/m/1362247df2bb4f62/original/ADM-G2-U2-21-TE-CA.pdf#page=6) |  |  |  |

### Domain: Measurement and Data

##### Cluster: Measure and estimate lengths in standard units.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 3, 6, and 8.

* In **Unit 3**, students select and use tools — including rulers, yardsticks, meter sticks, and measuring strips — to measure the lengths of a variety of objects, such as classroom objects and images of animals, costume materials, rectangles, and ribbons, bracelets, and books. They measure the lengths of longer objects in both meters and centimeters and in both inches and feet, noting that more units are needed to measure the length of the same object if a shorter length unit is used. Before measuring, students estimate the lengths of objects in centimeters, inches, feet, and meters. They explain their estimation strategies, which may include trial and error, repeating units mentally (such as base-ten cubes, tens rods, and inch tiles), and using other objects of known lengths as benchmarks. Students measure the lengths and then compare them to their estimates to reflect on their estimation strategies. They measure and compare the lengths of objects initially using base-ten cubes and tens rods and then using standard units (centimeters) to measure and compare the lengths of objects. Students express the difference in lengths between two objects using centimeters.
* In **Unit 6**, students use rulers to draw shapes with specified side lengths in inches and centimeters, understanding that shapes in the same category can look different. They measure the edge lengths of solid shapes, deepening their understanding of the differences between flat shapes and solid shapes.
* In **Unit 8**, students use inch tiles to measure the lengths and widths of rectangles, connecting arrays to rectangles to understand that rectangles can be composed of equal rows and equal columns. As they use inch tiles to measure the lengths and widths of rectangles, they first estimate the dimensions.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.MD.1 | Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. | **Student Edition**   * [3.03 (Activity 1, Problems 1–4, pages 277–278)](https://learning.amplify.com/m/1a6d576c8313c5bd/original/ADM-G2-U3-03-SE-lesson-answer-key-CA.pdf#page=1) * [3.05 (Activity 2, Problems 4–7, page 292)](https://learning.amplify.com/m/492c7977d8345bc9/original/ADM-G2-U3-05-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.03 (Activity 1, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 277D and 277–278)](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=4) * [3.05 (Activity 2, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 292 and 292A)](https://learning.amplify.com/m/13ab62e70bfe4efa/original/ADM-G2-U3-05-TE-CA.pdf#page=6) * [3.09 (Activity 1, Purpose and entire Launch section, page 317D)](https://learning.amplify.com/m/51693aa1bb51e63d/original/ADM-G2-U3-09-TE-CA.pdf#page=4) * [3.09 (Warm-Up, entire Connect section, page 317C)](https://learning.amplify.com/m/51693aa1bb51e63d/original/ADM-G2-U3-09-TE-CA.pdf#page=3)   **Centers Resources**   * Estimate and Measure (Stage 4, [Directions](https://learning.amplify.com/m/bd3bb0d343daa08/original/ADM-2-ctr-estimate-and-measure-s4-directions.pdf)) |  |  |  |
| 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. | **Student Edition**   * [3.09 (Activity 1, Problems 1–7, pages 317–318)](https://learning.amplify.com/m/472012a66ef79a54/original/ADM-G2-U3-09-SE-lesson-answer-key-CA.pdf#page=1) * [3.05 (Activity 2, Problems 4–5, page 292)](https://learning.amplify.com/m/492c7977d8345bc9/original/ADM-G2-U3-05-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.05 (Activity 2, entire Connect section, page 292)](https://learning.amplify.com/m/13ab62e70bfe4efa/original/ADM-G2-U3-05-TE-CA.pdf#page=6) * [3.09 (Activity 1, entire Launch and Connect, page 317D)](https://learning.amplify.com/m/51693aa1bb51e63d/original/ADM-G2-U3-09-TE-CA.pdf#page=4)   **Centers Resources**   * Estimate and Measure (Stage 5, [Directions](https://learning.amplify.com/m/5e073d9f6ee8611d/original/ADM-2-ctr-estimate-and-measure-s5-directions.pdf)) |  |  |  |
| 2.MD.3 | Estimate lengths using units of inches, feet, centimeters, and meters. | **Student Edition**   * [3.04 (Activity 1, Problem 1, page 284)](https://learning.amplify.com/m/7e292f596955e554/original/ADM-G2-U3-04-SE-lesson-answer-key-CA.pdf#page=1) * [3.08 (Activity 1, Problems 1–3, pages 311–312)](https://learning.amplify.com/m/4c6d4f9065587b7c/original/ADM-G2-U3-08-SE-lesson-answer-key-CA.pdf#page=1) * [7.03 (Practice, Problems 5–6, page 665)](https://learning.amplify.com/m/7684e9a733a35516/original/ADM-G2-U7-03-SE-practice-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.04 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 284–285 and 285A)](https://learning.amplify.com/m/427b727d7d6bd9f0/original/ADM-G2-U3-04-TE-CA.pdf#page=4) * [3.08 (Activity 1, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 311D and 311–312)](https://learning.amplify.com/m/5dbb2937136bd7c5/original/ADM-G2-U3-08-TE-CA.pdf#page=4) * [3.09 (Activity 2, Purpose, Launch, and Connect, page 319A)](https://learning.amplify.com/m/51693aa1bb51e63d/original/ADM-G2-U3-09-TE-CA.pdf#page=6) * [3.05 (Activity 2, Launch, beginning with “Use the Think-Pair-Share routine”, page 292)](https://learning.amplify.com/m/13ab62e70bfe4efa/original/ADM-G2-U3-05-TE-CA.pdf#page=6)   **Centers Resources**   * Estimate and Measure (Stage 4, [Directions](https://learning.amplify.com/m/bd3bb0d343daa08/original/ADM-2-ctr-estimate-and-measure-s4-directions.pdf)) * Target Measurements (Stage 1, [Directions](https://learning.amplify.com/m/4616155c52ae295a/original/ADM-2-ctr-target-measurements-s1-directions.pdf)) |  |  |  |
| 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. | **Student Edition**   * [3.03 (Activity 2, Problems 5–9, pages 279–280)](https://learning.amplify.com/m/1a6d576c8313c5bd/original/ADM-G2-U3-03-SE-lesson-answer-key-CA.pdf#page=3) * [3.02 (Activity 2, Problems 4–8, pages 272-273)](https://learning.amplify.com/m/2bd5018293559f0/original/ADM-G2-U3-02-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.03 (Activity 2, entire Connect section and Differentiation | Teacher Moves, rows 2–3, pages 279A and 279–280)](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=6) * [3.03 (Synthesis, bullets under “Ask” and sentence beginning with “Say”, page 281A](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=8) and [Screen 9)](https://teacher.desmos.com/activitybuilder/custom/68059c78907aef8d98728e8b?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c78907aef8d987289f9#preview/04338c64-4134-49d5-b3d5-603cb693c557)   **Centers Resources**   * Measure and Compare (Stage 2, [Directions](https://learning.amplify.com/m/21ed1e2e16419065/original/ADM-2-ctr-measure-and-compare-s2-directions.pdf)) * Target Measurements (Stage 1, [Directions](https://learning.amplify.com/m/4616155c52ae295a/original/ADM-2-ctr-target-measurements-s1-directions.pdf)) |  |  |  |

##### Cluster: Relate addition and subtraction to length.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 3, 4, and 5.

* In **Unit 3**, students add and subtract within 100 to solve a variety of one- and two-step story problems (*Compare*, *Add To/Take From*, and *Put Together/Take Apart*) involving lengths in centimeters, meters, inches, and feet. They represent the problems using tape diagrams and equations with a symbol for the unknown.
* In **Unit 4**, students use addition and subtraction within 100 to solve story problems (*Take From* and *Take Apart*) involving length measurements and use number lines and equations with a symbol for the unknown to represent the problems. They are introduced to the number line (with equally-spaced tick marks) as a way to represent and compare whole numbers within 100 and represent addition and subtraction within 100. They represent whole numbers as lengths from zero on a number line.
* In **Unit 5**, students recognize that the structure of the number line can be extended to three-digit numbers. They represent numbers up to 1,000 as lengths from zero on number lines and use number lines to compare numbers.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.MD.5 | Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units. | *Use addition within 100 to solve word problems involving lengths that are given in the same units.*  **Student Edition**   * [3.11 (Activities 1–2, Problems 1–3, 5–6, pages 331–334)](https://learning.amplify.com/m/6787a562b9039e76/original/ADM-G2-U3-11-SE-lesson-answer-key-CA.pdf#page=1) * [3.12 (Activities 1–2, Problems 1, 3–4, pages 338–341)](https://learning.amplify.com/m/66abe893615c4827/original/ADM-G2-U3-12-SE-lesson-answer-key-CA.pdf#page=1) * [3.06 (Activity 2, Problems 3–5, pages 298–299)](https://learning.amplify.com/m/2a2126a6cba38bc6/original/ADM-G2-U3-06-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [3.11 (Activity 2, Differentiation | Teacher Moves, page 333–334)](https://learning.amplify.com/m/2222bb62e591583f/original/ADM-G2-U3-11-TE-CA.pdf#page=7) * [3.06 (Activity 1, entire Connect section, page 296–297)](https://learning.amplify.com/m/5ad4b2b8fccb9aea/original/ADM-G2-U3-06-TE-CA.pdf#page=4) * [3.12 (Activities 1–2, Differentiation | Teacher Moves, pages 339A and 341A)](https://learning.amplify.com/m/73c37d5ea09c046c/original/ADM-G2-U3-12-TE-CA.pdf#page=5) * [3.06 (Activity 2, entire Connect section, Differentiation | Teacher Moves row 3, pages 298–299 and 299A)](https://learning.amplify.com/m/5ad4b2b8fccb9aea/original/ADM-G2-U3-06-TE-CA.pdf#page=6)   *Use subtraction within 100 to solve word problems involving lengths that are given in the same units.*  **Student Edition**   * [3.06 (Activity 1, Problem 2, page 297)](https://learning.amplify.com/m/2a2126a6cba38bc6/original/ADM-G2-U3-06-SE-lesson-answer-key-CA.pdf#page=2) * [3.12 (Activities 1–2, Problems 1, 3–4, pages 338–341)](https://learning.amplify.com/m/66abe893615c4827/original/ADM-G2-U3-12-SE-lesson-answer-key-CA.pdf#page=1) * [3.11 (Activities 1–2, Problems 3 and 6, pages 332 and 334)](https://learning.amplify.com/m/6787a562b9039e76/original/ADM-G2-U3-11-SE-lesson-answer-key-CA.pdf#page=1) * [3.06 (Activity 2, Problems 3–5, pages 298–299)](https://learning.amplify.com/m/2a2126a6cba38bc6/original/ADM-G2-U3-06-SE-lesson-answer-key-CA.pdf#page=3) * [Unit 3 (Sub-Unit Summary, Sub-Unit 2, bullet 3, page 344B)](https://learning.amplify.com/m/69cd70e1ee7aff42/original/ADM-G2-U3-SUM-CA.pdf#page=2)   **Teacher Edition**   * [3.06 (Activity 2, entire Connect section, Differentiation | Teacher Moves row 2, pages 298–299 and 299A)](https://learning.amplify.com/m/5ad4b2b8fccb9aea/original/ADM-G2-U3-06-TE-CA.pdf#page=6) * [3.12 (Activity 1, Differentiation | Teacher Moves, page 339A)](https://learning.amplify.com/m/73c37d5ea09c046c/original/ADM-G2-U3-12-TE-CA.pdf#page=5) * [3.11 (Activity 2, Differentiation | Teacher Moves, page 333–334)](https://learning.amplify.com/m/2222bb62e591583f/original/ADM-G2-U3-11-TE-CA.pdf#page=7) |  |  |  |
| 2.MD.6 | Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. | *Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,...*  **Student Edition**   * [4.03 (Activities 1–2, Problems 1–9, pages 380–382)](https://learning.amplify.com/m/1055fb5df91080b4/original/ADM-G2-U4-03-SE-lesson-answer-key-CA.pdf#page=1) * [4.02 (Activity 1, Problems 1–2, pages 374–375)](https://learning.amplify.com/m/4d3d90a6dc6c950/original/ADM-G2-U4-02-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [4.03 (Activity 1, entire Connect section and Differentiation | Teacher moves, pages 380–381 and 381A)](https://learning.amplify.com/m/19857ff6d0e3a30/original/ADM-G2-U4-03-TE-CA.pdf#page=4) * 4.02 ([Activity 1, entire Connect section, page 374–375](https://learning.amplify.com/m/4e6c1cc1d61229b1/original/ADM-G2-U4-02-TE-CA.pdf#page=4) and [Screen 3](https://teacher.desmos.com/activitybuilder/custom/68059c7c907aef8d9872d705?collections=68059c6e907aef8d9871c951%2C68059c7c907aef8d9872d415#preview/15b897fb-36d5-4eba-bed8-f5634d514793))   **Centers Resources**   * Number Line Scoot (Stage 1, [Directions](https://learning.amplify.com/m/2c3750c49d2b2d6f/original/ADM-2-ctr-number-line-scoot-s1-directions.pdf) and [Gameboard](https://learning.amplify.com/m/43fbb899b76bc25e/original/ADM-2-ctr-number-line-scoot-s1-gameboard.pdf))   *Represent whole-number sums and differences within 100 on a number line diagram.*  **Student Edition**   * [4.07 (Activity 2, Problems 1–5, page 411–412)](https://learning.amplify.com/m/3b498902698b607e/original/ADM-G2-U4-07-SE-lesson-answer-key-CA.pdf#page=3) * [4.11 (Summary, page 441)](https://learning.amplify.com/m/bb7532110f13c0a/original/ADM-G2-U4-11-SE-practice-answer-key-CA.pdf#page=1) * [4.13 (Activity 1, Problems 1 and 3, pages 451–452)](https://learning.amplify.com/m/23b614c373256bc2/original/ADM-G2-U4-13-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [4.07 (Activity 2, Screen 6)](https://teacher.desmos.com/activitybuilder/custom/68059c7d907aef8d9872e16e?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c7c907aef8d9872d415#preview/708596ca-dbff-4e36-a360-be568e0ec103) * [4.10 (Activity 2, Differentiation | Teacher Moves, page 433A)](https://learning.amplify.com/m/7b03a880a2edbe16/original/ADM-G2-U4-10-TE-CA.pdf#page=7)   **Centers Resources**   * Jump the Line (Stage 1, [Directions](https://learning.amplify.com/m/2f1c39abfc9790be/original/ADM-2-ctr-jump-the-line-s1-directions.pdf), [Gameboard](https://learning.amplify.com/m/5f322905ec565b29/original/ADM-2-ctr-jump-the-line-s1-gameboard.pdf), and [Spinners](https://learning.amplify.com/m/4dfc7902ddd1bdcd/original/ADM-2-ctr-jump-the-line-s1-spinner.pdf)) |  |  |  |

##### 

##### Cluster: Work with time and money.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 2 and 6.

* In **Unit 2**, students are introduced to pennies, nickels, dimes, quarters, and dollar bills. They use the ¢ and $ symbols as they find the values of groups of coins or bills. Students solve a variety of story problems involving money in these denominations.
* In **Unit 6**, students tell and write time in five-minute intervals from both analog clocks and digital clocks. They connect the analog clock face to a circular number line and tell time by skip counting by five or by using benchmark times. Students use the labels a.m. and p.m. They move on to explore calendars, recognizing different units of time (e.g., days, weeks, and months) and using relationships between those units (e.g., how many days are in a given month or how many weeks are in a year).

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.MD.7 | Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. Know relationships of time. | *Tell and write time from analog clocks to the nearest five minutes.*  **Student Edition**   * [6.13 (Activity 1, Problems 1–4, pages 617–618)](https://learning.amplify.com/m/7738f0a6a1460f81/original/ADM-G2-U6-13-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [6.13 (Activity 1, entire Launch, page 617D](https://learning.amplify.com/m/5e6b04970da57d1/original/ADM-G2-U6-13-TE-CA.pdf#page=4) and [Screen 2)](https://teacher.desmos.com/activitybuilder/custom/68059c85907aef8d98738590?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/97a380cb-ebc5-4c40-95d4-96de84c4e463) * [6.13 (Warm-Up, page 617C](https://learning.amplify.com/m/5e6b04970da57d1/original/ADM-G2-U6-13-TE-CA.pdf#page=3) and [Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c85907aef8d98738590?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/e65638a0-3cf8-40ae-a4bf-de9df2e534c4)   *Tell and write time from digital clocks to the nearest five minutes.*  **Student Edition**   * [6.15 (Activity 2, Problems 8–13, pages 633–634)](https://learning.amplify.com/m/4fb036de46150aa9/original/ADM-G2-U6-15-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [6.15 (Warm-Up, page 631C](https://learning.amplify.com/m/60188308422d9662/original/ADM-G2-U6-15-TE-CA.pdf#page=3) and [Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c85907aef8d987387e4?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/683b38f9-a813-4925-807d-4842df9a6ef8)   *Tell and write time using a.m. and p.m.*  **Student Edition**   * [6.15 (Activity 1, Problems 1–7, pages 631–632)](https://learning.amplify.com/m/4fb036de46150aa9/original/ADM-G2-U6-15-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [6.15 (Activity 1, Launch, sections beginning with “Display” and “Say”, page 631D](https://learning.amplify.com/m/60188308422d9662/original/ADM-G2-U6-15-TE-CA.pdf#page=4) and [Screens 2–3)](https://teacher.desmos.com/activitybuilder/custom/68059c85907aef8d987387e4?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/a28156a5-85f9-4895-a368-bae225df1586)   *Know relationships of time.*  **Student Edition**   * [6.16 (Activity 1, Problem 1, pages 638–639)](https://learning.amplify.com/m/1abc7d70165da82d/original/ADM-G2-U6-16-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [6.13 (Warm-Up, page 617C](https://learning.amplify.com/m/5e6b04970da57d1/original/ADM-G2-U6-13-TE-CA.pdf#page=3) and [Screen 1)](https://teacher.desmos.com/activitybuilder/custom/68059c85907aef8d98738590?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/e65638a0-3cf8-40ae-a4bf-de9df2e534c4) * [6.16 (Warm-Up, page 638C)](https://learning.amplify.com/m/1b3c4bc928876c69/original/ADM-G2-U6-16-TE-CA.pdf#page=3) * [6.16 (Activity 1, entire Connect section, page 638–639)](https://learning.amplify.com/m/1b3c4bc928876c69/original/ADM-G2-U6-16-TE-CA.pdf#page=4) |  |  |  |
| 2.MD.8 | Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. | **Student Edition**   * [2.03 (Activity 2, Problems 5–8, pages 121–122)](https://learning.amplify.com/m/6ba020d6e312d2cb/original/ADM-G2-U2-03-SE-lesson-answer-key-CA.pdf#page=3) * [2.04 (Activity 2, Problems 3–4, pages 128)](https://learning.amplify.com/m/cb9150caa89beb4/original/ADM-G2-U2-04-SE-lesson-answer-key-CA.pdf#page=3) * [2.06 (Activities 1–2, Problems 1–7, pages 140–143)](https://learning.amplify.com/m/73797e9b3a912185/original/ADM-G2-U2-06-SE-lesson-answer-key-CA.pdf#page=1) * [2.03 (*Show What You Know* PDF)](https://learning.amplify.com/m/6a948ee1f88091ce/original/ADM-G2-U2-03-show-what-you-know-answer-CA.pdf) * [2.06 (*Show What You Know* PDF)](https://learning.amplify.com/m/18c025578acf9f25/original/ADM-G2-U2-06-show-what-you-know-answer-CA.pdf) * [Unit 2 (Sub-Unit Summary, Sub–Unit 1)](https://learning.amplify.com/m/66d1c0fc4a357a68/original/ADM-G2-U2-SUM-CA.pdf#page=1)   **Teacher Edition**   * [2.03 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 121–122)](https://learning.amplify.com/m/4a5be77cd60c8256/original/ADM-G2-U2-03-TE-CA.pdf#page=7) * [2.06 (Activity 1, Differentiation | Teacher Moves, rows 2–3, page 141A)](https://learning.amplify.com/m/1f47c1145c578c81/original/ADM-G2-U2-06-TE-CA.pdf#page=5) |  |  |  |

##### Cluster: Represent and interpret data.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 1, 2, and 3.

* In **Unit 1**, students make sense of the structure and features of picture graphs and bar graphs with single-unit scales. They interpret data in these graphs by solving *Put Together/Take Apart* and *Compare* problems. They move on to draw picture graphs and bar graphs to represent data sets with up to four categories, including data they have collected using their own survey questions. Students solve *Put Together/Take Apart* and *Compare* problems using data presented in picture graphs and bar graphs.
* In **Unit 2**, students interpret four data representations involving coins (one of which is a bar graph) to prepare them for adding the values of groups of coins or bills.
* In **Unit 3**, students generate measurement data by measuring the lengths of a variety of objects including ribbons, bracelets, and books. They create line plots to represent the data and interpret the data by answering questions.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 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. | *Generate measurement data by measuring lengths of several objects to the nearest whole unit.*  **Student Edition**   * [3.14 (Activity 1, Problem 1, page 353)](https://learning.amplify.com/m/14fbbc75683beb80/original/ADM-G2-U3-14-SE-lesson-answer-key-CA.pdf#page=1) * [3.15 (Activity 1, Problem 1, page 360)](https://learning.amplify.com/m/4017aae16bbdb3c/original/ADM-G2-U3-15-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [3.14 (Activity 1, entire Launch, page 277D)](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=4)   *Generate measurement data by making repeated measurements of the same object.*  **Student Edition**   * [3.02 (Activity 1, Problems 1–3, pages 270–271)](https://learning.amplify.com/m/2bd5018293559f0/original/ADM-G2-U3-02-SE-lesson-answer-key-CA.pdf#page=1) * [3.05 (Activity 2, Problems 4–5, page 292)](https://learning.amplify.com/m/492c7977d8345bc9/original/ADM-G2-U3-05-SE-lesson-answer-key-CA.pdf#page=2)   **Teacher Edition**   * [3.03 (Activity 1, entire Launch, page 277D)](https://learning.amplify.com/m/48589d36385c5c96/original/ADM-G2-U3-03-TE-CA.pdf#page=4) * [3.05 (Activity 2, Launch, paragraph beginning with “Say”, page 292)](https://learning.amplify.com/m/13ab62e70bfe4efa/original/ADM-G2-U3-05-TE-CA.pdf#page=6)   **Centers Resources**   * Estimate and Measure (Stage 5, [Directions](https://learning.amplify.com/m/5e073d9f6ee8611d/original/ADM-2-ctr-estimate-and-measure-s5-directions.pdf))   *Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.*  **Student Edition**   * [3.14 (Activities 1–2, Problems 2, 4–5, pages 354 and 356)](https://learning.amplify.com/m/14fbbc75683beb80/original/ADM-G2-U3-14-SE-lesson-answer-key-CA.pdf#page=2) * [3.15 (Activity 1, Problem 2, page 361)](https://learning.amplify.com/m/4017aae16bbdb3c/original/ADM-G2-U3-15-SE-lesson-answer-key-CA.pdf#page=2)   **Teacher Edition**   * [3.14 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 355–356)](https://learning.amplify.com/m/60fb231ea1e1be84/original/ADM-G2-U3-14-TE-CA.pdf#page=7) * [3.15 (Activity 1, entire Connect section and Differentiation | Teacher Moves, pages 360–361 and 361A)](https://learning.amplify.com/m/5f8bc411323765ff/original/ADM-G2-U3-15-TE-CA.pdf#page=4) * [3.13 (entire Synthesis, page 350A](https://learning.amplify.com/m/3d557fa253aa236b/original/ADM-G2-U3-13-TE-CA.pdf#page=8) and [Screen 8)](https://teacher.desmos.com/activitybuilder/custom/68059c79907aef8d98729a6e?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c78907aef8d987289f9#preview/a36d8c27-c640-4858-ae11-21f2b6e1e1bc) |  |  |  |
| 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 using information presented in a bar graph. | *Draw a picture graph to represent a data set with up to four categories.*  **Student Edition**   * 1.10 (Activity 1, [Problem 1, page 61](https://learning.amplify.com/m/4f2bded76fe67339/original/ADM-G2-U1-10-SE-lesson-answer-key-CA.pdf#page=1) and [Activity 1 PDF](https://learning.amplify.com/m/4381119e83466460/original/ADM-2-1-10-activity1-answers.pdf)) * [1.12 (Activity 2, Problems 5–6, page 74)](https://learning.amplify.com/m/79313fd11a346108/original/ADM-G2-U1-12-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [1.10 (Activity 1, entire Launch and Differentiation | Teacher Moves, pages 61D and 61–62)](https://learning.amplify.com/m/2ba79ed3db718041/original/ADM-G2-U1-10-TE-CA.pdf#page=4) * [1.12 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 74A)](https://learning.amplify.com/m/194bbf9cfc5e76b2/original/ADM-G2-U1-12-TE-CA.pdf#page=7)   *Draw a bar graph (with single-unit scale) to represent a data set with up to four categories.*  **Student Edition**   * 1.10 (Activity 2, [Problem 3, page 63](https://learning.amplify.com/m/4f2bded76fe67339/original/ADM-G2-U1-10-SE-lesson-answer-key-CA.pdf#page=3) and [Activity 2 PDF](https://learning.amplify.com/m/258708418bfd1d61/original/ADM-2-1-10-activity2-answers.pdf)) * [1.12 (Activity 2, Problems 5–6, page 74)](https://learning.amplify.com/m/79313fd11a346108/original/ADM-G2-U1-12-SE-lesson-answer-key-CA.pdf#page=3) * [1.13 (Activity 2, Directions, page 82)](https://learning.amplify.com/m/5e8a966c61274a84/original/ADM-G2-U1-13-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [1.10 (Activity 2, entire Connect section, page 63A)](https://learning.amplify.com/m/2ba79ed3db718041/original/ADM-G2-U1-10-TE-CA.pdf#page=6)   *Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.*  **Student Edition**   * [1,11 (Activity 2, Problems 2–4, page 68)](https://learning.amplify.com/m/29bed5a91870d0b5/original/ADM-G2-U1-11-SE-lesson-answer-key-CA.pdf#page=2) * [1.13 (Activities 1–2, Problems 1–6, pages 80–83)](https://learning.amplify.com/m/5e8a966c61274a84/original/ADM-G2-U1-13-SE-lesson-answer-key-CA.pdf#page=1) * [1.13 (Activity 2, Problems 3–6, pages 82–83)](https://learning.amplify.com/m/5e8a966c61274a84/original/ADM-G2-U1-13-SE-lesson-answer-key-CA.pdf#page=3) * [1.10 (Practice Problem 4, page 66)](https://learning.amplify.com/m/ac38c802c3b3091/original/ADM-G2-U1-10-SE-practice-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [1.11 (Activity 2, Differentiation | Teacher Moves, rows 2–3, page 68A)](https://learning.amplify.com/m/72438a2ac51a865b/original/ADM-G2-U1-11-TE-CA.pdf#page=7) * [1.13 (Activity 1, Connect, beginning with “Use the Think-Pair-Share routine”, page 80–81)](https://learning.amplify.com/m/340b30020c56834e/original/ADM-G2-U1-13-TE-CA.pdf#page=4) |  |  |  |

### Domain: Geometry

##### Cluster: Reason with shapes and their attributes.

How does the program address this aspect of the domain?

Amplify Desmos Math California addresses this aspect of the domain in Units 6 and 8.

* In **Unit 6**, students sort and identify examples and non-examples of triangles, quadrilaterals, pentagons, and hexagons based on their attributes — the number of sides and corners of each type of shape. They identify solid shapes (cubes, prisms, cylinders, cones, and spheres) and describe their attributes — number of faces, shape of faces, flat faces with corners, or curved surfaces. Students partition rectangles and circles into two, three, and four equal parts and describe the equal parts as *halves*, *thirds*, and *fourths/ quarters*. As they partition shapes into equal parts in different ways, students generalize that the parts have the same name and are the same size, even if their shapes are different. They continue partitioning shapes and describing halves, thirds, and quarters using the language *a half* *of*, *a third of*, and a *quarter of* or *fourth of*. Through the use of story problems involving food sharing, students recognize two halves, three thirds, and four fourths as one whole.
* In **Unit 8**, students partition rectangles into a given number of rows and columns of equal-sized squares. They use the structure of arrays to find the total number of squares, preparing them for understanding area and multiplication in Grade 3. Students partition rectangles into equal-size squares and interpret the partition as the rows and columns of an array.

| **Standard** | **Standard Language** | **Publisher/Developer Citations** | **Met**  **Yes** | **Met**  **No** | **Reviewer Notes** |
| --- | --- | --- | --- | --- | --- |
| 2.G.1 | Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.[[4]](#footnote-3) Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. | *Recognize shapes having specified attributes, such as a given number of angles or a given number of equal faces.*  **Student Edition**   * 6.02 (Activity 2, [Problems 1–2, page 544](https://learning.amplify.com/m/69b61359def84ced/original/ADM-G2-U6-02-SE-lesson-answer-key-CA.pdf#page=3) and [Activity 1 PDF](https://learning.amplify.com/m/3ecca1d8c721bb48/original/ADM-ctr-shape-cards-G2-pdf.pdf)) * [6.06 (Activity 2, Problems 3–4, page 570)](https://learning.amplify.com/m/35f650c2c9a02a46/original/ADM-G2-U6-06-SE-lesson-answer-key-CA.pdf#page=2) * [6.07 (Activity 2, Problem 1, pages 576–577)](https://learning.amplify.com/m/43106d1dccb54027/original/ADM-G2-U6-07-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * [6.03 (Activity 1, entire Connect section, page 548-549)](https://learning.amplify.com/m/3a90901480462ad5/original/ADM-G2-U6-03-TE-CA.pdf#page=4) * [6.06 (Activity 2, entire Connect section, page 570)](https://learning.amplify.com/m/3209199d34ecb549/original/ADM-G2-U6-06-TE-CA.pdf#page=6) * [6.07 (Activity 2, entire Connect section, page 576–577)](https://learning.amplify.com/m/62ca11a8ef15255/original/ADM-G2-U6-07-TE-CA.pdf#page=6)   **Centers Resources**   * Mystery Shape (Stage 3, [Directions](https://learning.amplify.com/m/68f10762b3137c23/original/ADM-2-ctr-mystery-shape-s3-directions.pdf) and [Shape Cards, Grade 2](https://learning.amplify.com/m/3ecca1d8c721bb48/original/ADM-ctr-shape-cards-G2-pdf.pdf)) * Mystery Shape (Stage 4, [Directions](https://learning.amplify.com/m/47c2a3e80a8b9250/original/ADM-2-ctr-mystery-shape-s4-directions.pdf))   *Draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.*  **Student Edition**   * 6.05 ([Activity 2, Problems 4–5, pages 564–565](https://learning.amplify.com/m/5c1b43f476e96b7e/original/ADM-G2-U6-05-SE-lesson-answer-key-CA.pdf#page=3) and [Activity 2 PDF](https://learning.amplify.com/m/3a4baa0ae5b30221/original/ADM-G2-U6-05-sheet-CA.pdf)) * [6.03 (Activity 2, Problems 1–3, pages 550–551)](https://learning.amplify.com/m/2fbdce3268ffcce7/original/ADM-G2-U6-03-SE-lesson-answer-key-CA.pdf#page=3) * [6.04 (Activity 1, Screens 4–5)](https://teacher.desmos.com/activitybuilder/custom/68059c84907aef8d98737405?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/1f01de5e-f0c5-4e90-a6d0-55d6a02d067f)   **Teacher Edition**   * [6.05 (Activity 2, Differentiation | Teacher Moves, row 3, page 565A)](https://learning.amplify.com/m/79f685b47a3bc9d7/original/ADM-G2-U6-05-TE-CA.pdf#page=7)   **Centers Resources**   * Can You Draw It? (Stage 3, [Directions](https://learning.amplify.com/m/67630646d5369aea/original/ADM-2-ctr-can-you-draw-it-s3-directions.pdf) and [Shape Cards, Grade 2](https://learning.amplify.com/m/3ecca1d8c721bb48/original/ADM-ctr-shape-cards-G2-pdf.pdf))   *Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.*  **Student Edition**   * [6.02 (*Show What You Know* PDF)](https://learning.amplify.com/m/13d0c24c95227a79/original/ADM-G2-U6-02-show-what-you-know-answer-CA.pdf) * [6.07 (*Show What You Know* PDF)](https://learning.amplify.com/m/70dfccf6952c5bdf/original/ADM-G2-U6-07-show-what-you-know-answer-CA.pdf) * [6.02 (Practice, Problems 1–2, pages 545–555)](https://learning.amplify.com/m/4eccc2c71377ea5d/original/ADM-G2-U6-02-SE-practice-CA.pdf#page=1)   **Teacher Edition**   * [6.02 (Activity 2, entire Connect section, page 544)](https://learning.amplify.com/m/6b6b7bd7e82d6a25/original/ADM-G2-U6-02-TE-CA.pdf#page=6)   **Centers Resources**   * Mystery Shape (Stage 3, [Directions](https://learning.amplify.com/m/68f10762b3137c23/original/ADM-2-ctr-mystery-shape-s3-directions.pdf) and [Shape Cards, Grade 2](https://learning.amplify.com/m/3ecca1d8c721bb48/original/ADM-ctr-shape-cards-G2-pdf.pdf)) * Mystery Shape (Stage 4, [Directions](https://learning.amplify.com/m/47c2a3e80a8b9250/original/ADM-2-ctr-mystery-shape-s4-directions.pdf)) |  |  |  |
| 2.G.2 | Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. | *Partition a rectangle into rows and columns of same-size squares.*  **Student Edition**   * [8.13 (Activity 1, Screens 2–6)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742d5c?collections=68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/3e6c0ce9-dcd9-4dd4-b0f0-e6c379e97c98) * [8.12 (Activity 2, Problems 4–6, pages 859–860)](https://learning.amplify.com/m/6840114c691b31df/original/ADM-G2-U8-12-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * 8.12 ([Activity 1, entire Connect section and Differentiation | Teacher moves, pages 857D and 857–858](https://learning.amplify.com/m/38ae0d879e6cb15/original/ADM-G2-U8-12-TE-CA.pdf#page=4) and [Screen 4](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742c3d?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/f582c897-bb6f-4c48-a61b-68927cd70e2f))   *Count to find the total number of them.*  **Student Edition**   * [8.13 (Activity 2, Screens 7–9)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742d5c?collections=68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/3f26f8bc-9a44-4f27-af01-626b59040d90) * [8.12 (Activity 2, Problems 4–6, pages 859–860)](https://learning.amplify.com/m/6840114c691b31df/original/ADM-G2-U8-12-SE-lesson-answer-key-CA.pdf#page=3)   **Teacher Edition**   * 8.13 ([Activity 2, entire Connect section and Differentiation | Teacher moves, pages 866–867 and 867A](https://learning.amplify.com/m/60a29c608deace98/original/ADM-G2-U8-13-TE-CA.pdf#page=6) and [Screen 9](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742d5c?collections=68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/10748661-ddc4-4a58-89ba-35ddff55d548)) * [8.13 (entire Synthesis, page 868A](https://learning.amplify.com/m/60a29c608deace98/original/ADM-G2-U8-13-TE-CA.pdf#page=8) and [Screen 10)](https://teacher.desmos.com/activitybuilder/custom/68059c8d907aef8d98742d5c?collections=67fd335d907aef8d98f2f10c%2C68059c6e907aef8d9871c951%2C68059c8c907aef8d98741a30#preview/6c690362-bc8b-4346-aacd-7c24ff645473) |  |  |  |
| 2.G.3 | Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words *halves*, *thirds*, *half of*, *a third of*, 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. | *Partition circles and rectangles into two, three, or four equal shares.*  **Student Edition**   * [6.09 (Activity 1, Problems 1–3, pages 588–589)](https://learning.amplify.com/m/2916be829002d6bc/original/ADM-G2-U6-09-SE-lesson-answer-key-CA.pdf#page=1) * [6.10 (Activity 2, Screens 5–7)](https://teacher.desmos.com/activitybuilder/custom/68059c84907aef8d98737ec0?collections=68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/44f6d38c-e806-497f-8cf8-024e41df828d)   **Teacher Edition**   * [6.10 (Activity 2, Differentiation | Teacher Moves, page 597–598)](https://learning.amplify.com/m/2e08a2439436fbbc/original/ADM-G2-U6-10-TE-CA.pdf#page=7)   *Describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths.*  **Student Edition**   * [6.11 (Activity 1, Problems 1–6, page 602–603)](https://learning.amplify.com/m/55fcb11ee560c7a7/original/ADM-G2-U6-11-SE-lesson-answer-key-CA.pdf#page=1) * [6.11 (*Show What You Know* PDF)](https://learning.amplify.com/m/2c9cdbcdd9d73ead/original/ADM-G2-U6-11-show-what-you-know-answer-CA.pdf) * [6.09 (Activity 1, Problems 1–3, pages 588–589)](https://learning.amplify.com/m/2916be829002d6bc/original/ADM-G2-U6-09-SE-lesson-answer-key-CA.pdf#page=1)   **Teacher Edition**   * [6.11 (Activity 1, entire Connect section, pages 602–603)](https://learning.amplify.com/m/7c0f1fe23dfb0a63/original/ADM-G2-U6-11-TE-CA.pdf#page=4)   *Recognize that equal shares of identical wholes need not have the same shape.*  **Student Edition**   * [6.10 (Activity 1, Screens 2–4)](https://teacher.desmos.com/activitybuilder/custom/68059c84907aef8d98737ec0?collections=68059c6e907aef8d9871c951%2C68059c84907aef8d98736ddc#preview/f78287d4-977f-40e2-a6e0-c5f83d01a581)   **Teacher Edition**   * [6.10 (Activity 1, entire Connect section, page 595D)](https://learning.amplify.com/m/2e08a2439436fbbc/original/ADM-G2-U6-10-TE-CA.pdf#page=4) * [6.10 (entire Synthesis, page 599A)](https://learning.amplify.com/m/2e08a2439436fbbc/original/ADM-G2-U6-10-TE-CA.pdf#page=8) |  |  |  |

## Appendix: (Publisher/Developer, please enter any additional notes regarding the standards below.)

California Department of Education, October 2024

1. The California Common Core State Standards: Mathematics were adopted by the State Board of Education on August 2, 2010, (and modified pursuant to Senate Bill 1200 on January 16, 2013). This standards map is organized by Big Idea and Content Connections in alignment with the *Mathematics Framework for California Public Schools: Kindergarten Through Grade Twelve*, approved by the State Board of Education on July 12, 2023. [↑](#footnote-ref-0)
2. See standard 1.OA.6 for a list of mental strategies. [↑](#footnote-ref-1)
3. Explanations may be supported by drawings or objects. [↑](#footnote-ref-2)
4. Sizes are compared directly or visually, not compared by measuring. [↑](#footnote-ref-3)