

Publisher/Developer: MIND Education

Program Title: InsightMath California

Approved by the State Board of Education January 18, 2024

Components: Digital Planning Guide (DPG) [*G5_U01_L1 (Grade 5, Unit 1, Lesson 1)*, *G5_U01_Inv (Grade 5, Unit 1, Investigation)*]; ST Math Game (STM); Playbook (PB); Practice Book (PP)

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2025 California Common Core State Standards: Mathematics Adoption¹ Standards Map Template Grade Five

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.

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.

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 |
|---|---|--|---------|--------|----------------|
| Multiplying and dividing by powers of 10 is the foundation for decimal numbers. | Powers and place value Fraction connections Modeling | 5.NBT.1, 5.NBT.2, 5.NBT.3, 5.NBT.3.a, 5.NBT.3.b, 5.NBT.4, 5.NBT.7, 5.MD.1 Decimal notation is introduced through connection to the schema, language, and notation of fractions. Metric measurement conversions provide context for patterns in multiplying by powers of 10. | | | |
| Multidigit computation can be reduced to repeated processes based on a series of single-digit computations. | Powers and place value Modeling | 5.NBT.1, 5.NBT.2, 5.NBT.5, 5.OA.1, 5.OA.1 Place value understanding supports extension of whole number multiplication using the standard algorithm to the level of fluency. | | | |

| 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 |
|---|---|---|---------|--------|----------------|
| Division of multidigit numbers is a repeated process of estimating partial quotients based on multiples of the divisor. | Powers and place value Seeing division | 5.NF.3, 5.OA.2, 5.NBT.2, 5.NBT.5, 5.NBT.6, 5.MD.1, Place value understanding supports extension of whole number division. Developing understanding of division as a quotient and interpreting fractional answers in context establishes a fundamental link between division and fractions. Measurement conversions provide relevant context. | | | |

| 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 |
|---|---|--|---------|--------|----------------|
| Multiplication can help to discover, understand, and explain three-dimensional space and relationships between numbers. | Layers of cubes Factors and groups Modeling Seeing division | 5.MD.1, 5.MD.3, 5.MD.3.a, 5.MD.3.b, 5.MD.4, 5.MD.5, 5.MD.5.a, 5.MD.5.b, 5.MD.5.c, 5.OA.1, 5.OA.2, 5.OA.2.1 Length and area measurement schema is extended to three dimensions. Volume serves as a context for building fluency with multiplication and division and for understanding and applying associative property, order of operations, factorization, and associated symbolic notation. | | | |
| Quantities can be added and subtracted when the units are the same size. | Fraction connections Modeling | 5.NF.1, 5.NF.2, 5.OA.1, 5.MD.2 Strategies and models based on place value understanding (adding and subtracting like units) are applied to addition and subtraction of fractions (adding and subtracting like units). | | | |

| 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 |
|--|---|--|---------|--------|----------------|
| Using flexible fraction and multiplication interpretations helps to multiply with fractions. | Fraction connections Modeling Shapes on a plane Factors and groups | 5.NF.3, 5.NF.4, 5.NF.4.a, 4.NF.4.b, 5.NF.5, 5.NF.5.a, 5.NF.5.b, 5.NF.6 Operational schemas are expanded to include understanding multiplication as scaling and fractions as quotients and to solve problems involving fractions with these expanded schemas. Fraction multiplication skills are applied to area calculations and other problems involving fractional measurements. | | | |
| Using multiplication and flexible division interpretations helps to divide with fractions. | Fraction connections Modeling | 5.NF.2, 5.NF.3, 5.NF.4.a, 5.NF.6, 5.NF.7.a, 5.NF.7.b, 5.NF.7.c, Operational schemas are expanded to include understanding multiplication as scaling and fractions as quotients and to solve problems involving fractions with these expanded schema. Division skills are applied to problems involving fractional measurements. | | | |

| 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 |
|--|---|--|---------|--------|----------------|
| Extending place value patterns and fraction understanding can help to multiply decimals. | Modeling Powers and place value Fraction connections | <p>5.NF.4.b, 5.NF.5, 5.NF.5.a, 5.NF.5.b, 5.NBT.1, 5.NBT.2, 5.NBT.3.b, 5.NBT.5, 5.NBT.7, 5.OA.1</p> <p>Multiplication schema is expanded to include understanding multiplication as scaling to solve problems involving decimals with this expanded schema. Problem solving involving measurement conversions provides relevant context and supports place value understanding of decimals.</p> | | | |
| Extending place value patterns and fraction understanding can help to divide decimals. | Modeling Seeing division Powers and place value Fraction connections | <p>5.NF.3, 5.NBT.1, 5.NBT.2, 5.NBT.7, 5.NF.4.b, 5.NF.5.a, 5.NF.5.b</p> <p>Problem solving involving measurement conversions provides relevant context and supports place value understanding of decimals and developing interpretation of decimal answers as quotients in context.</p> | | | |

| 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 |
|---|---|---|---------|--------|----------------|
| Creating geometric structures and categories helps to analyze and organize space. | Telling a data story Plotting patterns Shapes on a plane Modeling | 5.G.1, 5.G.2, 5.G.3, 5.G.4, 5.MD.1, 5.OA.3 Number line understanding is extended to a second dimension to generate a coordinate plane and develop a deeper understanding of two-dimensional space and shapes. This marks also the beginning of representation of two patterns and the relationship between them simultaneously. | | | |

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](#) (TK–grade 2 and grades 3–5) and [chapter 7](#) (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 both the 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

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|---|---------|--------|----------------|
| MP.1 | Make sense of problems and persevere in solving them. | DPG G5_U01_L15 (E1→RC1) DPG G5_U03_L05 (E1→E12) DPG G5_U07_L09 (E1→E3) DPG G5_U08_L04 (E1→E4) DPG G5_U10_L05 (E2→E6) | | | |
| MP.2 | Reason abstractly and quantitatively. | DPG G5_U01_L01 (E1→RC1) DPG G5_U06_L14 (E1→E5) DPG G5_U07_L01 (E1→E4) DPG G5_U08_L01 (E1→E3) DPG G5_U09_L08 (E1→E4) | | | |
| MP.3 | Construct viable arguments and critique the reasoning of others. | DPG G5_U01_L07 (E1, E3→E4) DPG G5_U05_L06 (E1→RC1) DPG G5_U06_L17 (E1→RC1) DPG G5_U07_L13 (E1→E4) DPG G5_U09_L07 (E2→RC1) | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--------------------------------------|--|---------|--------|----------------|
| MP.4 | Model with mathematics. | DPG G5_U02_L00 (I1→W1) DPG G5_U03_L01 (E1→E3) DPG G5_U05_L08 (E1→E5) DPG G5_U06_L08 (E1→E2, E4→E5) DPG G5_U07_L07 (E1, E3) | | | |
| MP.5 | Use appropriate tools strategically. | DPG G5_U05_L08 (E3→E5) DPG G5_U06_L03 (E2→E4) DPG G5_U06_L07 (E3) DPG G5_U07_L04 (E4) DPG G5_U07_L09 (E1→E3) | | | |
| MP.6 | Attend to precision. | DPG G5_U01_L05 (E1→E6) DPG G5_U02_L04 (E1→E4) DPG G5_U04_L13 (E1→E3) DPG G5_U09_L11 (E4) DPG G5_U10_L02 (E4) | | | |
| MP.7 | Look for and make use of structure. | DPG G5_U01_L13 (E1→RC1) DPG G5_U02_L09 (E1→E5) DPG G5_U04_L03 (E1→E6) DPG G5_U06_L00 (P1→I1) DPG G5_U10_L01 (E3→RC1) | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| MP.8 | Look for and express regularity in repeated reasoning. | DPG G5_U01_L12 (E1→RC1) DPG G5_U04_L04 (E1→RC1) DPG G5_U06_L08 (E4→E8) DPG G5_U09_L03 (E3→RC1) DPG G5_U09_L07 (E2→RC1) | | | |

Grade-level Content Standards

Domain: Operations and Algebraic Thinking

Cluster: Write and interpret numerical expressions.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.OA.1 | Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. | DPG G5_U05_L03 DPG G5_U05_L04 DPG G5_U04_L12 DPG G5_U04_L13 DPG G5_U08_L11 | | | |
| 5.OA.2 | Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. | DPG G5_U02_L08 (E2, RC1) DPG G5_U03_L06 (L1) DPG G5_U04_L10 DPG G5_U04_L13 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.OA.2.1 | Express a whole number in the range 2–50 as a product of its prime factors. For example, find the prime factors of 24 and express 24 as $2 \times 2 \times 2 \times 3$. | DPG G5_U04_L09(WT1) DPG G5_U04_L10 PP_G5_U04_L10 | | | |

Cluster: Analyze patterns and relationships.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.OA.3 | Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. | Generate patterns and identify relationships: DPG G5_U10_L09 DPG G5_U10_L10 PB G5_U10_L10 PP G5_U10_L10 Form ordered pairs and graph them: DPG G5_U10_L11 PP G5_U10_L11 | | | |

Domain: Numbers and Operations in Base Ten**Cluster: Understand the place value system.**

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.NBT.1 | Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. | DPG G5_U01_L01 DPG G5_U01_L06 DPG G5_U01_L12 DPG G5_U02_L04 DPG G5_U08_L07 DPG G5_U09_L08 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|---|---------|--------|----------------|
| 5.NBT.2 | <p>Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.</p> | <p>Patterns: DPG G5_U01_L12 DPG G5_U02_L02 DPG G5_U02_L08 DPG G5_U08_L02 DPG G5_U08_L09 DPG G5_U09_L09</p> <p>Use exponents: DPG G5_U01_L14 DPG G5_U01_L14 (WT1) PP G5_U01_L14 DPG G5_U01_L15</p> | | | |
| 5.NBT.3a | <p>Read, write, and compare decimals to thousandths. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form.</p> | DPG G5_U01_L01 DPG G5_U01_L02 DPG G5_U01_L06 | | | |
| 5.NBT.3b | <p>Read, write, and compare decimals to thousandths. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> | DPG G5_U01_L05 DPG G5_U01_L07 DPG G5_U08_L08 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.NBT.4 | Use place value understanding to round decimals to any place. | DPG G5_U01_L08 DPG G5_U01_L14 (WT1) PP G5_U01_L08 PP G5_U02_L03 PP G5_U05_L02 PP G5_U09_L06 PP G5_U10_L02 PP G5_U10_L07 | | | |

Cluster: Perform operations with multi-digit whole numbers and with decimals to hundredths.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.NBT.5 | Fluently multiply multi-digit whole numbers using the standard algorithm. | DPG G5 U02 L05 DPG G5 U02 L08 DPG G5 U03 L13 DPG G5 U08 L04 | | | |
| 5.NBT.6 | Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | DPG G5 U03 L04 DPG G5 U03 L06 DPG G5 U03 L07 DPG G5 U03 L14 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.NBT.7 | Add, subtract, multiply, and divide decimals to hundredths, 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 and explain the reasoning used. | Add/sub: DPG G5_U01_L09 DPG G5_U01_L10 DPG G5_U01_L11 DPG G5_U01_L16 Multiplication: DPG G5_U08_L01 DPG G5_U08_L03 DPG G5_U08_L08 DPG G5_U08_L10 Division: DPG G5_U09_L03 DPG G5_U09_L04 DPG G5_U09_L08 | | | |

Domain: Number and Operations—Fractions

Cluster: Use equivalent fractions as a strategy to add and subtract fractions.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|---|---------|--------|----------------|
| 5.NF.1 | Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. | DPG G5_U05_L07 DPG G5_U05_L09 DPG G5_U05_L11 DPG G5_U05_L14 | | | |
| 5.NF.2 | Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. | Common denominators: DPG G5_U05_L01 DPG G5_U05_L03 Unlike denominators: DPG G5_U05_L08 DPG G5_U05_L14 DPG G5_U07_L13 (E2) Benchmark fractions to estimate and assess reasonableness: DPG G5_U05_L06 DPG G5_U05_L08 | | | |

Cluster: Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.NF.3 | <p>Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.</p> | <p>Interpret fraction as division: DPG G5_U06_L02 DPG G5_U07_L02 DPG G5_U09_L01</p> <p>Solve word problems with fractional answers: DPG G5_U03_L01 DPG G5_U03_L03 DPG G5_U07_L02</p> | | | |
| 5.NF.4a | <p>Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$.</p> | <p>$(a/b) \times q$:</p> <p>DPG G5_U06_L04 DPG G5_U06_L06 DPG G5_U06_L08 DPG G5_U06_L10</p> <p>$q \times (a/b)$:</p> <p>DPG G5_U06_L03 DPG G5_U06_L07</p> <p>$(a/b) \times (c/d)$:</p> <p>DPG G5_U06_L13 DPG G5_U07_L12</p> | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|---|---------|--------|----------------|
| 5.NF.4b | <p>Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> | <p>Find area by tiling to compare: DPG G5_U06_L18 DPG G5_U06_L19</p> <p>Find area by multiplying side lengths: DPG G5_U06_L18 DPG G5_U06_L19 DPG G5_U06_L20 DPG G5_U09_L11</p> <p>Represent fraction products as areas: DPG G5_U06_L13 DPG G5_U06_L14 DPG G5_U06_L18 (RC1) DPG G5_U08_L01 DPG G5_U09_L11</p> | | | |
| 5.NF.5a | <p>Interpret multiplication as scaling (resizing), by: Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</p> | DPG G5_U06_L09 DPG G5_U06_L11 DPG G5_U06_L20 (L1) DPG G5_U08_L01 DPG G5_U08_L06 (L1) | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|---|---------|--------|----------------|
| 5.NF.5b | <p>Interpret multiplication as scaling (resizing), by:</p> <p>Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence</p> $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ <p>to the effect of multiplying $\frac{a}{b}$ by 1.</p> | DPG G5_U06_L06 DPG G5_U06_L09 DPG G5_U06_L11 DPG G5_U06_L17 DPG G5_U08_L06 (L1) DPG G5_U09_L08 | | | |
| 5.NF.6 | Solve real world problems involving multiplication of fractions and mixed numbers. | DPG G5_U06_L06 DPG G5_U06_L10 DPG G5_U06_L13 DPG G5_U06_L20 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.NF.7a | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. ² Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. | DPG G5_U07_L03 DPG G5_U07_L09 DPG G5_U07_L10 DPG G5_U07_L12 | | | |
| 5.NF.7b | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. ² Interpret division of a whole number by a unit fraction, and compute such quotients. | DPG G5_U07_L06 DPG G5_U07_L08 DPG G5_U07_L10 DPG G5_U07_L12 | | | |
| 5.NF.7c | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. ² Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions. | DPG G5_U07_L03 DPG G5_U07_L06 DPG G5_U07_L09 DPG G5_U07_L13 | | | |

Domain: Measurement and Data

Cluster: Convert like measurement units within a given measurement system.

² Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.MD.1 | Convert among different-sized standard measurement units within a given measurement system, and use these conversions in solving multi-step, real world problems. | <p>Metric: DPG G5 U01 L15 DPG G5 U01 L16</p> <p>US Customary: DPG G5 U04 L16 DPG G5 U04 L18 DPG G5 U10 L07</p> <p>Multi-step, real world problems: DPG G5 U01 L16 DPG G5 U03 L13 DPG G5 U04 L19 DPG G5 U10 L07</p> | | | |

Cluster: Represent and interpret data.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|---|---------|--------|----------------|
| 5.MD.2 | Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. | Make a line plot: DPG G5_U05_L05 DPG G5_U05_L10 Solve problems: DPG G5_U05_L05 PP G5_U05_L05 DPG G5_U05_L10 | | | |

Cluster: Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.MD.3a | Recognize volume as an attribute of solid figures and understand concepts of volume measurement. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. | DPG G5_U04_L01 DPG G5_U04_L02 DPG G5_U04_L06 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|---|---------|--------|----------------|
| 5.MD.3b | Recognize volume as an attribute of solid figures and understand concepts of volume measurement. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. | DPG G5_U04_L02 DPG G5_U04_L03 | | | |
| 5.MD.4 | Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. | Improvised units: DPG G5_U04_L01 DPG G5_U04_L02 Cubic cm: DPG G5_U04_L02 DPG G5_U04_L05 Cubic in: DPG G5_U04_L06 PB G5_U04_L06 PP G5_U04_L07 Cubic ft: DPG G5_U04_L06 PP G5_U04_L06 | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|--|---------|--------|----------------|
| 5.MD.5a | <p>Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes.</p> | <p>Find volume: DPG G5_U04_L04 DPG G5_U04_L05</p> <p>Represent products as volumes: DPG G5_U04_L07 DPG G5_U04_L08 DPG G5_U04_L09</p> | | | |
| 5.MD.5b | <p>Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> | <p>DPG G5_U04_L05 DPG G5_U04_L06 DPG G5_U04_L07</p> <p>Real world: DPG G5_U04_L06 PB G5_U04_L06 PP G5_U04_L08 DPG G5_U04_L19</p> | | | |

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|---|---------|--------|----------------|
| 5.MD.5c | <p>Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p> | <p>DPG G5_U04_L14 Real world problems: DPG G5_U04_L15 DPG G5_U04_L19</p> | | | |

Domain: Geometry

Cluster: Graph points on the coordinate plane to solve real-world and mathematical problems.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|---|---|---------|--------|----------------|
| 5.G.1 | <p>Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates.</p> <p>Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond.</p> | DPG G5_U10_L05 DPG G5_U10_L06 DPG G5_U10_L07 DPG G5_U10_L08 | | | |
| 5.G.2 | <p>Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.</p> | <p>Mathematical:</p> <p>DPG G5_U10_L05 DPG G5_U10_L06</p> <p>Real world:</p> <p>DPG G5_U10_L07 DPG G5_U10_L08</p> | | | |

Cluster: Classify two-dimensional figures into categories based on their properties.

How does the program address this aspect of the domain?

| Standard | Standard Language | Publisher/Developer Citations | Met Yes | Met No | Reviewer Notes |
|----------|--|--|---------|--------|----------------|
| 5.G.3 | Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. | DPG G5_U10_L01 DPG G5_U10_L03 DPG G5_U10_L04 | | | |
| 5.G.4 | Classify two-dimensional figures in a hierarchy based on properties. | DPG G5_U10_L03 DPG G5_U10_L04 | | | |

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

California Department of Education, October 2024