

CALIFORNIA Correlations



California Common Core State Standards: Mathematics (CA CCSSM) Correlation

Classroom Mathematics California lessons are aligned to the California Common Core State Standards: Mathematics (CA CCSSM). The standards for each lesson are further classified as *Focus*, *Developing*, or *Applied*.

- Focus standards indicate the instructional goal of the lesson and the content assessed on the Lesson Quiz or Comprehension Check.
- Developing standards indicate concepts and skills that are being introduced and developed but will be the focus of a future lesson. These standards will be assessed in a future Lesson Quiz or Comprehension Check.
- Applied standards indicate skills and concepts that were the focus of a previous lesson that have already been assessed. These standards are now considered part of a student's toolkit and will be applied in this lesson.

Correlation by CA CCSSM

Standard	Lesson(s)
Operations and Algebraic Thinking	
Use the four operations with whole numbers to solve problems.	
4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	Focus: 6 Applied: 7
4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	Focus: 7 Developing: 6 Applied: 10, 28, 29
4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Focus: 10 Applied: 28, 29
Gain familiarity with factors and multiples.	
4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.	Focus: 8 Applied: 9
Generate and analyze patterns.	
4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i>	Focus: 9

Standard	Lesson(s)
Number and Operations in Base Ten	
Generalize place value understanding for multi-digit whole numbers.	
4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. <i>For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</i>	Focus: 1 Applied: 2, 11
4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Focus: 1, 2
4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.	Focus: 3 Applied: 4, 5, 11
Use place value understanding and properties of operations to perform multi-digit arithmetic.	
4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Focus: 4, 5 Applied: 28, 29
4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Focus: 11, 12 Applied: 13, 14, 15, 16, 28, 29
4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-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.	Focus: 14, 15 Developing: 10 Applied: 16, 28, 29
Number and Operations – Fractions	
Extend understanding of fraction equivalence and ordering.	
4.NF.1 Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{(n \times a)}{(n \times b)}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	Focus: 17 Applied: 18, 25
4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	Focus: 18

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Number and Operations – Fractions <i>continued</i>	
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	
4.NF.3 Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. <i>Examples:</i> $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$. c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem	Focus: 19, 20, 21 Focus: 19 Applied: 20, 21 Focus: 20 Applied: 21 Focus: 21 Applied: 22, 29 Focus: 20 Applied: 21, 22, 29
4.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. <i>For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times \left(\frac{1}{4}\right)$, recording the conclusion by the equation $\frac{5}{4} = 5 \times \left(\frac{1}{4}\right)$.</i> b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. <i>For example, use a visual fraction model to express $3 \times \left(\frac{2}{5}\right)$ as $6 \times \left(\frac{1}{5}\right)$, recognizing this product as $\frac{6}{5}$. (In general, $n \times \left(\frac{a}{b}\right) = \frac{n \times a}{b}$).</i> c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. <i>For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</i>	Focus: 23, 24 Focus: 23 Applied: 24 Focus: 23 Applied: 24 Focus: 24
Understand decimal notation for fractions, and compare decimal fractions.	
4.NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. <i>For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.</i>	Focus: 25
4.NF.6 Use decimal notation for fractions with denominators 10 or 100. <i>For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.</i>	Focus: 26

Standard	Lesson(s)
4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using the number line or another visual model.	Focus: 27
Measurement and Data	
Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	
4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i>	Focus: 13 Applied: 28, 29
4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Focus: 28, 29
4.MD.3 Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i>	Focus: 16
Represent and interpret data.	
4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots. <i>For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.</i>	Focus: 22
Geometric measurement: understand concepts of angle and measure angles.	
4.MD.5 Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.	Focus: 30, 31 Applied: 32, 33 Focus: 30, 31 Applied: 32 Focus: 30, 31 Applied: 32
4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Focus: 31

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	Focus: 32
Geometry	
Draw and identify lines and angles, and classify shapes by properties of their lines and angles.	
4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	Focus: 30 Applied: 33
4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. (Two-dimensional shapes should include special triangles, e.g., equilateral, isosceles, scalene, and special quadrilaterals, e.g., rhombus, square, rectangle, parallelogram, trapezoid.)	Focus: 33
4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Focus: 34



Standards for Mathematical Practice (SMP) Correlation

Classroom Mathematics California lessons embed the Standards for Mathematical Practice (SMP) to support students in becoming powerful users of mathematics to make sense of their world. The following table shows which SMP are embedded in the lesson structure and which are targeted by the Deepen Understanding feature and in STEM Stories. Further description of how the SMP are integrated into the lessons and built into the framework can be found before the first unit of each volume.

Correlation by SMP

SMP	Lessons and STEM Stories
1 Make sense of problems and persevere in solving them.	Embedded in all Strategy lessons. Targeted in Lessons 16, 29, 32. STEM Stories: Sylvia Acevedo
2 Reason abstractly and quantitatively.	Embedded in all lessons. Targeted in Lessons 5, 8, 9, 16, 21, 27, 28, 31, 32. STEM Stories: Fred Begay
3 Construct viable arguments and critique the reasoning of others.	Embedded in all lessons. Targeted in Lessons 5, 7, 22, 25, 33. STEM Stories: Annie Jump Cannon
4 Model with mathematics.	Embedded in all Strategy lessons. Targeted in Lessons 8, 10, 11, 13, 14, 18, 20, 22, 28–30. STEM Stories: Richard Tapia
5 Use appropriate tools strategically.	Embedded in all Strategy lessons. Targeted in Lessons 29, 30, 33.
6 Attend to precision.	Embedded in all Strategy lessons. Targeted in Lessons 10, 30, 31.
7 Look for and make use of structure.	Embedded in all lessons. Targeted in Lesson 4, 7, 8, 11–15, 18, 20, 21, 24, 26, 27, 33, 34. STEM Stories: Lonnie Johnson
8 Look for and express regularity in repeated reasoning.	Embedded in all Strategy lessons. Targeted in Lessons 2–4, 8, 9, 26.



Classroom Mathematics California

Lesson Correlation

This table identifies for each *Classroom Mathematics California* lesson the *Focus*, *Developing*, and/or *Applied* CA CCSSM standards. It also identifies the SMP that are embedded and which are targeted by a Deepen Understanding.

Correlation by Lesson

Lesson	Standard(s)	SMP
Unit 1 Whole Numbers: Place Value, Comparison, Addition, and Subtraction		
Lesson 1 Understand Place Value	Focus: 4.NBT.1, 4.NBT.2	Embedded: 2, 3, 7
Lesson 2 Compare Whole Numbers	Focus: 4.NBT.2 Applied: 4.NBT.1	Embedded: 1–8 Targeted: 8
Lesson 3 Round Whole Numbers	Focus: 4.NBT.3	Embedded: 1–8 Targeted: 8
Lesson 4 Add Whole Numbers	Focus: 4.NBT.4 Applied: 4.NBT.3	Embedded: 1–8 Targeted: 7, 8
Lesson 5 Subtract Whole Numbers	Focus: 4.NBT.4 Applied: 4.NBT.3	Embedded: 1–8 Targeted: 2, 3
Unit 2 Operations: Multiplication, Division, and Algebraic Thinking		
Lesson 6 Understand Multiplication as a Comparison	Focus: 4.OA.1 Developing: 4.OA.2	Embedded: 2, 3, 7
Lesson 7 Multiplication and Division in Word Problems	Focus: 4.OA.2 Applied: 4.OA.1	Embedded: 1–8 Targeted: 3, 7
Lesson 8 Multiples and Factors	Focus: 4.OA.4	Embedded: 1–8 Targeted: 2, 4, 7, 8
Lesson 9 Number and Shape Patterns	Focus: 4.OA.5 Applied: 4.OA.4	Embedded: 1–8 Targeted: 2, 8
Lesson 10 Model and Solve Multi-Step Problems	Focus: 4.OA.3 Developing: 4.NBT.6 Applied: 4.OA.2	Embedded: 1–8 Targeted: 4, 6
Unit 3 Multi-Digit Operations and Measurement: Multiplication, Division, Perimeter and Area		
Lesson 11 Multiply by One-Digit Numbers	Focus: 4.NBT.5 Applied: 4.NBT.1, 4.NBT.3	Embedded: 1–8 Targeted: 4, 7
Lesson 12 Multiply by Two-Digit Numbers	Focus: 4.NBT.5	Embedded: 1–8 Targeted: 7
Lesson 13 Use Multiplication to Convert Measurements	Focus: 4.MD.1 Applied: 4.NBT.5	Embedded: 1–8 Targeted: 4, 7
Lesson 14 Divide Three-Digit Numbers	Focus: 4.NBT.6 Applied: 4.NBT.5	Embedded: 1–8 Targeted: 4, 7

Lesson	Standard(s)	SMP
Unit 3 Multi-Digit Operations and Measurement: Multiplication, Division, Perimeter and Area <i>continued</i>		
Lesson 15 Divide Four-Digit Numbers	Focus: 4.NBT.6 Applied: 4.NBT.5	Embedded: 1–8 Targeted: 7
Lesson 16 Find Perimeter and Area	Focus: 4.MD.3 Applied: 4.NBT.5, 4.NBT.6	Embedded: 1–8 Targeted: 1, 2
Unit 4 Fractions, Decimals, and Measurement: Addition, Subtraction, and Multiplication		
Lesson 17 Understand Equivalent Fractions	Focus: 4.NF.1	Embedded: 2, 3, 7
Lesson 18 Compare Fractions	Focus: 4.NF.2 Applied: 4.NF.1	Embedded: 1–8 Targeted: 4, 7
Lesson 19 Understand Fraction Addition and Subtraction	Focus: 4.NF.3, 4.NF.3.a	Embedded: 2, 3, 7
Lesson 20 Add and Subtract Fractions	Focus: 4.NF.3.b, 4.NF.3.d Applied: 4.NF.3.a	Embedded: 1–8 Targeted: 4, 7
Lesson 21 Add and Subtract Mixed Numbers	Focus: 4.NF.3.c Applied: 4.NF.3.a, 4.NF.3.b, 4.NF.3.d	Embedded: 1–8 Targeted: 2, 7
Lesson 22 Add and Subtract Fractions in Line Plots	Focus: 4.MD.4 Applied: 4.NF.3.c, 4.NF.3.d	Embedded: 1–8 Targeted: 3, 4
Lesson 23 Understand Fraction Multiplication	Focus: 4.NF.4.a, 4.NF.4.b	Embedded: 2, 3, 7
Lesson 24 Multiply Fractions by Whole Numbers	Focus: 4.NF.4.c Applied: 4.NF.4.a, 4.NF.4.b	Embedded: 1–8 Targeted: 7
Lesson 25 Fractions as Tenths and Hundredths	Focus: 4.NF.5 Applied: 4.NF.1	Embedded: 1–8 Targeted: 3
Lesson 26 Relate Decimals and Fractions	Focus: 4.NF.6	Embedded: 1–8 Targeted: 7, 8
Lesson 27 Compare Decimals	Focus: 4.NF.7	Embedded: 1–8 Targeted: 2, 7
Lesson 28 Problems About Time and Money	Focus: 4.MD.2 Applied: 4.OA.2, 4.OA.3, 4.NBT.4, 4.NBT.5, 4.NBT.6, 4.MD.1	Embedded: 1–8 Targeted: 2, 4
Lesson 29 Problems About Length, Liquid Volume, Mass, and Weight	Focus: 4.MD.2 Applied: 4.OA.2, 4.OA.3, 4.NBT.4, 4.NBT.5, 4.NBT.6, 4.NF.3.c, 4.NF.3.d, 4.MD.1	Embedded: 1–8 Targeted: 1, 4, 5
Unit 5 Geometry and Measurement: Figures, Classification, and Symmetry		
Lesson 30 Points, Lines, Rays, and Angles	Focus: 4.G.1, 4.MD.5, 4.MD.5.a, 4.MD.5.b	Embedded: 1–8 Targeted: 4, 5, 6
Lesson 31 Angles	Focus: 4.MD.5, 4.MD.5.a, 4.MD.5.b, 4.MD.6	Embedded: 1–8 Targeted: 2, 6
Lesson 32 Add and Subtract with Angles	Focus: 4.MD.7 Applied: 4.MD.5, 4.MD.5.a, 4.MD.5.b	Embedded: 1–8 Targeted: 1, 2
Lesson 33 Classify Two-Dimensional Figures	Focus: 4.G.2 Applied: 4.G.1, 4.MD.5	Embedded: 1–8 Targeted: 3, 5, 7
Lesson 34 Symmetry	Focus: 4.G.3	Embedded: 1–8 Targeted: 7



English Language Development (ELD) Standards Correlation

Classroom Mathematics California supports the development of English Language Development (ELD) standards throughout the program.

The Try-Discuss-Connect instructional framework provides opportunities for students to focus on and practice **ELD.PI.4.1** *Exchanging information/ideas*, **ELD.PI.4.3** *Offering opinions*, **ELD.PI.4.5** *Listening actively*, **ELD.PI.4.6** *Reading/viewing closely*, and **ELD.PI.4.11** *Supporting opinions*.

Part I: Interacting in Meaningful Ways

ELD Standard	Supported In
Exchanging information/ideas	
ELD.PI.4.1.Em Contribute to conversations and express ideas by asking and answering <i>yes-no</i> and <i>wh-</i> questions and responding using short phrases.	English Learner Differentiation: L1S2, L1S3, L2S2, L3S2, L3S3, L4S2, L5S3, L6S1, L8S3, L11S3, L11S4, L12S1, L12S2, L14S2, L15S1, L16S3, L18S1, L18S3, L18S4, L19S1, L19S2, L19S3, L20S1, L20S2, L20S4, L21S2, L22S4, L24S1, L24S3, L25S2, L26S2, L27S1, L27S2, L28S1, L28S2, L29S1, L29S2, L29S5, L30S3, L30S4, L30S5, L31S2, L31S3, L32S1, L33S2, L34S1 Develop Academic Language: L1S2, L5S3, L6S2, L8S3, L11S2, L11S3, L13S2, L15S2, L16S3, L18S2, L21S2, L23S2, L27S3, L30S4
ELD.PI.4.1.Ex Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant questions, affirming others, and adding relevant information.	
ELD.PI.4.1.Br Contribute to class, group, and partner discussions, including sustained dialogue, by following turn-taking rules, asking relevant questions, affirming others, adding relevant information, building on responses, and providing useful feedback.	
Interacting via written English	
ELD.PI.4.2.Em Collaborate with peers on joint writing projects of short informational and literary texts, using technology where appropriate for publishing, graphics, and the like.	English Learner Differentiation: L2S3, L3S2, L5S3, L9S1, L10S3, L12S3, L14S2, L19S3, L22S2, L22S5, L23S2, L28S3, L31S1, L33S1, L33S3, L34S2
ELD.PI.4.2.Ex Collaborate with peers on joint writing projects of longer informational and literary texts, using technology where appropriate for publishing, graphics, and the like.	
ELD.PI.4.2.Br Collaborate with peers on joint writing projects of a variety of longer informational and literary texts, using technology where appropriate for publishing, graphics, and the like.	
Offering opinions	
ELD.PI.4.3.Em Negotiate with or persuade others in conversations using basic learned phrases (e.g., <i>I think . . .</i>), as well as open responses, in order to gain and/or hold the floor.	English Learner Differentiation: L2S1, L4S1, L6S3, L7S2, L7S4, L10S3, L13S4, L15S3, L16S2, L18S2, L21S3, L24S2, L27S3, L28S2 Develop Academic Language: L1S2, L3S2, L3S2, L4S3, L6S2, L9S2, L21S2, L25S2, L28S3
ELD.PI.4.3.Ex Negotiate with or persuade others in conversations using an expanded set of learned phrases (e.g., <i>I agree with X, but . . .</i>), as well as open responses, in order to gain and/or hold the floor, provide counterarguments, and so on.	
ELD.PI.4.3.Br Negotiate with or persuade others in conversations using a variety of learned phrases (e.g., <i>That’s a good idea. However . . .</i>), as well as open responses, in order to gain and/or hold the floor, provide counterarguments, elaborate on an idea, and so on.	

Citation Key L = Lesson, S = Session

ELD Standard	Supported In
Adapting language choices	
ELD.PI.4.4.Em Adjust language choices according to social setting (e.g., playground, classroom) and audience (e.g., peers, teacher), with substantial support.	English Learner Differentiation: L8S4, L15S1, L28S3, L34S3 Develop Academic Language: L4S3, L22S4
ELD.PI.4.4.Ex Adjust language choices according to purpose (e.g., persuading, entertaining), task (e.g., telling a story versus explaining a science experiment), and audience, with moderate support.	
ELD.PI.4.4.Br Adjust language choices according to purpose, task (e.g., facilitating a science experiment), and audience, with light support.	
Listening actively	
ELD.PI.4.5.Em Demonstrate active listening of read-alouds and oral presentations by asking and answering basic questions, with prompting and substantial support.	English Learner Differentiation: L6S3, L9S3, L12S2, L13S3, L16S4, L18S3, L19S2, L22S4, L23S3, L24S3, L27S2, L27S3, L29S5, L32S3, L34S2 Develop Academic Language: L2S2, L7S3, L26S2, L29S4
ELD.PI.4.5.Ex Demonstrate active listening of read-alouds and oral presentations by asking and answering detailed questions, with occasional prompting and moderate support.	
ELD.PI.4.5.Br Demonstrate active listening of read-alouds and oral presentations by asking and answering detailed questions, with minimal prompting and light support.	
Reading/viewing closely	
ELD.PI.4.6a.Em Describe ideas, phenomena (e.g., volcanic eruptions), and text elements (main idea, characters, events, and the like) based on close reading of a select set of grade-level texts, with substantial support.	English Learner Differentiation: L1S1, L1S2, L2S3, L3S1, L4S1, L4S3, L4S4, L7S1, L9S3, L9S4, L10S1, L10S1, L10S2, L10S4, L11S4, L12S1, L13S1, L13S3, L14S1, L14S3, L14S4, L15S3, L16S3, L16S4, L17S2, L18S1, L19S1, L19S3, L20S2, L20S3, L20S4, L21S2, L21S4, L22S1, L23S3, L24S1, L25S3, L26S4, L27S4, L28S1, L28S4, L29S2, L29S3, L30S1, L31S4, L32S2, L32S3, L32S4, L33S4, L33S5, L34S1 Develop Academic Language: L5S2, L10S2, L19S2, L20S2, L22S2, L27S2, L30S4, L32S3
ELD.PI.4.6a.Ex Describe ideas, phenomena (e.g., animal migration), and text elements (main idea, central message, and the like) in greater detail based on close reading of a variety of grade-level texts, with moderate support.	
ELD.PI.4.6a.Br Describe ideas, phenomena (e.g., pollination), and text elements (main idea, character traits, event sequence, and the like) in detail based on close reading of a variety of grade-level texts, with light support.	
ELD.PI.4.6b.Em Use knowledge of frequently used affixes (e.g., <i>un-</i> , <i>mis-</i>) and linguistic context, reference materials, and visual cues to determine the meaning of unknown words on familiar topics.	English Learner Differentiation: L25S1, L26S4, L29S3 Develop Academic Language: L8S4, L10S3, L14S1, L32S2
ELD.PI.4.6b.Ex Use knowledge of morphology (e.g., affixes, roots, and base words), linguistic context, and reference materials to determine the meaning of unknown words on familiar topics.	
ELD.PI.4.6b.Br Use knowledge of morphology (e.g., affixes, roots, and base words) and linguistic context to determine the meaning of unknown and multiple-meaning words on familiar and new topics.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Evaluating language choices	
ELD.PI.4.7.Em Describe the specific language writers or speakers use to present or support an idea (e.g., the specific vocabulary or phrasing used to provide evidence), with prompting and substantial support.	English Learner Differentiation: L5S2, L7S3, L18S4, L23S2, L29S1, L31S4 Develop Academic Language: L26S2, L31S3
ELD.PI.4.7.Ex Describe how well writers or speakers use specific language resources to support an opinion or present an idea (e.g., whether the vocabulary or phrasing used to provide evidence is strong enough), with prompting and moderate support.	
ELD.PI.4.7.Br Describe how well writers and speakers use specific language resources to support an opinion or present an idea (e.g., the clarity or appealing nature of language used to present evidence), with prompting and light support.	
Analyzing language choices	
ELD.PI.4.8.Em Distinguish how different words with similar meanings produce different effects on the audience (e.g., describing a character’s actions as <i>whined</i> versus <i>said</i>).	English Learner Differentiation: L5S1, L6S2, L14S3, L22S5 Develop Academic Language: L4S2, L20S4, L29S2, L29S4, L31S3, L32S2
ELD.PI.4.8.Ex Distinguish how different words with similar meanings (e.g., describing a character as <i>smart</i> versus <i>an expert</i>) and figurative language (e.g., <i>as big as a whale</i>) produce shades of meaning and different effects on the audience.	
ELD.PI.4.8.Br Distinguish how different words with related meanings (e.g., <i>fun</i> versus <i>entertaining</i> versus <i>thrilling</i> , <i>possibly</i> versus <i>certainly</i>) and figurative language produce shades of meaning and different effects on the audience.	
Presenting	
ELD.PI.4.9.Em Plan and deliver brief oral presentations on a variety of topics and content areas (e.g., retelling a story, explaining a science process, reporting on a current event, recounting a memorable experience, and so on), with substantial support.	Math in Action: Every unit; use Oral Presentation Checklist.
ELD.PI.4.9.Ex Plan and deliver longer oral presentations on a variety of topics and content areas (e.g., retelling a story, explaining a science process, reporting on a current event, recounting a memorable experience, and so on), with moderate support.	
ELD.PI.4.9.Br Plan and deliver oral presentations on a variety of topics in a variety of content areas (e.g., retelling a story, explaining a science process, reporting on a current event, recounting a memorable experience, and so on), with light support.	
Writing	
ELD.PI.4.10a.Em Write short literary and informational texts (e.g., a description of a flashlight) collaboratively (e.g., joint construction of texts with an adult or with peers) and sometimes independently.	English Learner Differentiation: L4S2, L5S2, L5S4, L6S1, L6S3, L7S2, L8S2, L8S5, L9S2, L11S4, L15S2, L16S2, L17S1, L17S2, L17S3, L18S2, L18S4, L19S1, L21S3, L22S3, L23S1, L24S2, L25S2, L26S1, L26S2, L27S1, L27S3, L28S2, L29S4, L30S3, L30S5, L31S3, L32S1, L32S4, L33S3
ELD.PI.4.10a.Ex Write longer literary and informational texts (e.g., an explanatory text on how flashlights work) collaboratively (e.g., joint construction of texts with an adult or with peers) and with increasing independence using appropriate text organization.	
ELD.PI.4.10a.Br Write longer and more detailed literary and informational texts (e.g., an explanatory text on how flashlights work) collaboratively (e.g., joint construction of texts with an adult or with peers) and independently using appropriate text organization and growing understanding of register.	

ELD Standard	Supported In
Writing <i>continued</i>	
ELD.PI.4.10b.Em Write brief summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	English Learner Differentiation: L1S3, L2S2, L3S1, L7S3, L8S3, L9S2, L11S3, L14S3, L16S1, L20S5, L23S1, L25S2, L26S3, L30S4
ELD.PI.4.10b.Ex Write increasingly concise summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	
ELD.PI.4.10b.Br Write clear and coherent summaries of texts and experiences using complete and concise sentences and key words (e.g., from notes or graphic organizers).	
Supporting opinions	
ELD.PI.4.11a.Em Support opinions by expressing appropriate/accurate reasons using textual evidence (e.g., referring to text) or relevant background knowledge about content, with substantial support.	English Learner Differentiation: L1S2, L4S2, L4S4, L8S4, L8S5, L11S1, L12S2, L13S1, L15S2, L16S2, L17S3, L18S2, L21S2, L21S3, L24S2, L26S2, L30S4, L31S3, L32S4, L33S5 Develop Academic Language: L3S2, L11S3, L16S2, L19S2, L20S3
ELD.PI.4.11a.Ex Support opinions or persuade others by expressing appropriate/accurate reasons using some textual evidence (e.g., paraphrasing facts) or relevant background knowledge about content, with moderate support.	
ELD.PI.4.11a.Br Support opinions or persuade others by expressing appropriate/accurate reasons using detailed textual evidence (e.g., quotations or specific events from text) or relevant background knowledge about content, with light support.	
ELD.PI.4.11b.Em Express ideas and opinions or temper statements using basic modal expressions (e.g., <i>can, will, maybe</i>).	English Learner Differentiation: L4S3, L7S4, L13S4, L20S5 Develop Academic Language: L25S2
ELD.PI.4.11b.Ex Express attitude and opinions or temper statements with familiar modal expressions (e.g., <i>maybe/probably, can/must</i>).	
ELD.PI.4.11b.Br Express attitude and opinions or temper statements with nuanced modal expressions (e.g., <i>probably/certainly, should/would</i>) and phrasing (e.g., <i>In my opinion . . .</i>).	
Selecting language resources	
ELD.PI.4.12a.Em Use a select number of general academic and domain-specific words to create precision while speaking and writing.	English Learner Differentiation: L1S1, L4S3, L5S2, L8S1, L9S1, L9S2, L11S2, L13S1, L13S2, L14S1, L14S2, L15S1, L15S2, L16S1, L18S1, L20S1, L21S1, L22S3, L22S5, L24S1, L29S1, L29S3, L29S4, L29S5, L30S1, L30S2, L30S5, L31S1, L31S2, L33S1, L33S3, L33S4, L34S3 Develop Academic Language: L7S2, L8S2, L9S3, L12S2, L13S3, L14S1, L14S3, L17S2, L21S3, L22S3, L24S2, L26S3, L28S2, L29S2, L29S3, L30S2, L30S3, L31S2, L33S2, L33S3, L33S4, L34S2 Build Your Vocabulary: Every unit Support Vocabulary Development: Every lesson, Session 1 Vocabulary Cards: Every unit
ELD.PI.4.12a.Ex Use a growing number of general academic and domain-specific words, synonyms, and antonyms to create precision and shades of meaning while speaking and writing.	
ELD.PI.4.12a.Br Use a wide variety of general academic and domain-specific words, synonyms, antonyms, and figurative language to create precision and shades of meaning while speaking and writing.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Selecting language resources <i>continued</i>	
ELD.PI.4.12b.Em Select a few frequently used affixes for accuracy and precision (e.g., She walks, I'm <i>unhappy</i>).	English Learner Differentiation: L11S2, L25S1, L25S3, L26S1, L26S3 Develop Academic Language: L18S3
ELD.PI.4.12b.Ex Select a growing number of frequently used affixes for accuracy and precision (e.g., She <i>walked</i> . He likes . . . , I'm <i>unhappy</i>).	
ELD.PI.4.12b.Br Select a variety of appropriate affixes for accuracy and precision (e.g., She's walking. I'm <i>uncomfortable</i> . They left <i>reluctant</i> ly).	

Part II: Learning About How English Works

ELD Standard	Supported In
Understanding text structure	
ELD.PII.4.1.Em Apply understanding of how different text types are organized to express ideas (e.g., how a narrative is organized sequentially) to comprehending texts and writing basic texts.	English Learner Differentiation: L2S1, L6S2, L8S4, L12S3, L17S2, L17S3, L20S5, L22S2, L23S1, L25S3, L30S2, L33S1 Develop Academic Language: L5S2, L32S3
ELD.PII.4.1.Ex Apply increasing understanding of how different text types are organized to express ideas (e.g., how a narrative is organized sequentially with predictable stages versus how an explanation is organized around ideas) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.4.1.Br Apply understanding of how different text types are organized to express ideas (e.g., how a narrative is organized sequentially with predictable stages versus how opinions/arguments are structured logically, grouping related ideas) to comprehending texts and writing cohesive texts.	
Understanding cohesion	
ELD.PII.4.2a.Em Apply basic understanding of language resources for referring the reader back or forward in text (e.g., how pronouns refer back to nouns in text) to comprehending texts and writing basic texts.	English Learner Differentiation: L9S4, L10S2, L22S1, L33S5 Develop Academic Language: L20S2, L27S2
ELD.PII.4.2a.Ex Apply growing understanding of language resources for referring the reader back or forward in text (e.g., how pronouns or synonyms refer back to nouns in text) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.4.2a.Br Apply increasing understanding of language resources for referring the reader back or forward in text (e.g., how pronouns, synonyms, or nominalizations refer back to nouns in text) to comprehending texts and writing cohesive texts.	

ELD Standard	Supported In
Understanding cohesion <i>continued</i>	
ELD.PII.4.2b.Em Apply basic understanding of how ideas, events, or reasons are linked throughout a text using everyday connecting words or phrases (e.g., <i>first, yesterday</i>) to comprehending texts and writing basic texts.	English Learner Differentiation: L3S2, L10S4, L11S1, L22S2, L22S3, L23S3, L27S2, L31S4 Develop Academic Language: L8S3
ELD.PII.4.2b.Ex Apply growing understanding of how ideas, events, or reasons are linked throughout a text using a variety of connecting words or phrases (e.g., <i>since, next, for example</i>) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.4.2b.Br Apply increasing understanding of how ideas, events, or reasons are linked throughout a text using an increasing variety of academic connecting and transitional words or phrases (e.g., <i>for instance, in addition, at the end</i>) to comprehending texts and writing cohesive texts.	
Using verbs and verb phrases	
ELD.PII.4.3.Em Use various verbs/verb types (e.g., doing, saying, being/having, thinking/feeling) and tenses appropriate to the text type and discipline (e.g., simple past for recounting an experience) for familiar topics.	English Learner Differentiation: L3S3, L4S1, L4S4, L7S1, L13S2, L21S4, L30S2 Develop Academic Language: L16S3, L31S2
ELD.PII.4.3.Ex Use various verbs/verb types (e.g., doing, saying, being/having, thinking/feeling) and tenses appropriate to the task, text type, and discipline (e.g., simple past for retelling, timeless present for science explanation) for an increasing variety of familiar and new topics.	
ELD.PII.4.3.Br Use various verbs/verb types (e.g., doing, saying, being/having, thinking/feeling) and tenses appropriate to the task and text type (e.g., timeless present for science explanation, mixture of past and present for historical information report) for a variety of familiar and new topics.	
Using nouns and noun phrases	
ELD.PII.4.4.Em Expand noun phrases in simple ways (e.g., adding an adjective) in order to enrich the meaning of sentences and add details about ideas, people, things, and so on.	English Learner Differentiation: L7S4, L8S2, L14S4, L21S4, L28S4, L34S1 Develop Academic Language: L8S2, L11S2, L27S3
ELD.PII.4.4.Ex Expand noun phrases in a variety of ways (e.g., adding adjectives to noun phrases or simple clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, things, and so on.	
ELD.PII.4.4.Br Expand noun phrases in an increasing variety of ways (e.g., adding general academic adjectives and adverbs to noun phrases or more complex clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, things, and so on.	
Modifying to add details	
ELD.PII.4.5.Em Expand sentences with familiar adverbials (e.g., basic prepositional phrases) to provide details (e.g., time, manner, place, cause, and so on) about a familiar activity or process (e.g., They walked <i>to the soccer field</i>).	English Learner Differentiation: L2S1, L5S1, L5S4, L9S3, L10S3, L20S3, L27S4, L33S2 Develop Academic Language: L5S3
ELD.PII.4.5.Ex Expand sentences with a growing variety of adverbials (e.g., adverbs, prepositional phrases) to provide details (e.g., time, manner, place, cause, and so on) about a familiar or new activity or process (e.g., They worked <i>quietly</i> . They ran <i>across the soccer field</i>).	
ELD.PII.4.5.Br Expand sentences with a variety of adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause, and so on) about a variety of familiar and new activities and processes (e.g., They worked <i>quietly all night in their room</i>).	

Part II: Learning About How English Works *continued*

ELD Standard	Supported In
Connecting ideas	
ELD.PII.4.6.Em Combine clauses in a few basic ways to make connections between and join ideas in sentences (e.g., creating compound sentences using coordinate conjunctions, such as <i>and, but, so</i>).	English Learner Differentiation: L8S1, L9S1, L17S1, L20S2, L29S4 Develop Academic Language: L13S2, L15S2
ELD.PII.4.6.Ex Combine clauses in an increasing variety of ways (e.g., creating complex sentences using familiar subordinate conjunctions) to make connections between and join ideas in sentences, for example, to express cause/effect (e.g., <i>The deer ran because the mountain lion came</i>) or to make a concession (e.g., <i>She studied all night even though she wasn't feeling well</i>).	
ELD.PII.4.6.Br Combine clauses in a wide variety of ways (e.g., creating complex sentences using a variety of subordinate conjunctions) to make connections between and join ideas, for example, to express cause/effect (e.g., <i>Since the lion was at the waterhole, the deer ran away</i>), to make a concession, or to link two ideas that happen at the same time (e.g., <i>The cubs played while their mother hunted</i>).	
Condensing ideas	
ELD.PII.4.7.Em Condense clauses in simple ways (e.g., through simple embedded clauses, as in, <i>The woman is a doctor. She helps children.</i> → <i>The woman is a doctor who helps children</i>) to create precise and detailed sentences.	English Learner Differentiation: L5S4, L9S4, L16S1, L32S2 Develop Academic Language: L22S2, L23S2
ELD.PII.4.7.Ex Condense clauses in an increasing variety of ways (e.g., through a growing number of embedded clauses and other condensing, as in, <i>The dog ate quickly. The dog choked.</i> → <i>The dog ate so quickly that it choked</i>) to create precise and detailed sentences.	
ELD.PII.4.7.Br Condense clauses in a variety of ways (e.g., through various types of embedded clauses and other ways of condensing as in, <i>there was a Gold Rush. It began in the 1850s. It brought a lot of people to California.</i> → <i>The Gold Rush that began in the 1850s brought a lot of people to California</i>) to create precise and detailed sentences.	

California Big Ideas Correlation

California has identified Big Ideas that support students in connecting concepts instead of seeing mathematics as a series of discrete topics. *Classroom Mathematics California* lessons support students in building Big Ideas in lessons, across units, and throughout the program.

Unit and Lesson Correlation

The table below shows where each Big Idea is addressed.

Big Idea	Unit and Lesson(s)
Circles, Fractions, and Decimals	Unit 4: Lessons 25, 26, 27, 28 Unit 5: Lessons 31, 32
Connected Problem Solving	Unit 1: Lessons 4, 5 Unit 2: Lessons 6, 10 Unit 3: Lesson 13
Factors and Area Models	Unit 2: Lessons 7, 8 Unit 3: Lessons 11, 12, 14, 15
Fraction Flexibility	Unit 4: Lesson 19, 20, 21, 23, 24
Measuring and Plotting	Unit 4: Lessons 22, 29
Multi-Digit Numbers	Unit 1: Lessons 1, 2, 3 Unit 3: Lesson 11
Number and Shape Patterns	Unit 2: Lesson 9
Rectangle Investigations	Unit 5: Lesson 33
Shapes and Symmetries	Unit 5: Lessons 30, 33, 34
Visual Fraction Models	Unit 4: Lessons 17, 18

Try It Inventory

The Try-Discuss-Connect framework is built around Try It tasks set in relevant real-world contexts. They focus on important mathematics, problem solving, and multiple representations. Each Try It has been aligned to a California Driver of Investigation (Why), Standard for Mathematical Practice (How), and Content Connection (What). You may share the Why-How-What statements from the table below with students to provide an inviting learning intention.

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 2			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for and express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while exploring changing quantities.</i>
LESSON 3			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</i>
LESSON 4			
1	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
LESSON 5			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for and express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while exploring changing quantities.</i>
LESSON 7			
1	<i>In order to make sense of the world . . .</i>	<i>students will construct viable arguments and critique the reasoning of others . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will construct viable arguments and critique the reasoning of others . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will construct viable arguments and critique the reasoning of others . . .</i>	<i>while exploring changing quantities.</i>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 8			
1	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to predict what will happen ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
3	<i>In order to predict what will happen...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
4	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
LESSON 9			
1	<i>In order to predict what will happen ...</i>	<i>students will look for and express regularity in repeated reasoning ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will look for and make use of structure ...</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will look for and make use of structure ...</i>	<i>while exploring changing quantities.</i>
LESSON 10			
1	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while discovering shape and space.</i>
LESSON 11			
1	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while exploring changing quantities.</i>
LESSON 12			
1	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while exploring changing quantities.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 13			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
LESSON 14			
1	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while exploring changing quantities.</i>
LESSON 15			
1	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while exploring changing quantities.</i>
LESSON 16			
1	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
LESSON 18			
1	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while taking wholes apart, putting parts together.</i>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 20			
1	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
4	<i>In order to predict what will happen ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 21			
1	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 22			
1	<i>In order to predict what will happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
2	<i>In order to impact the future ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
3	<i>In order to predict what will happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
4	<i>In order to predict what will happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
LESSON 24			
1	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 25			
1	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting parts together.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 26			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 27			
1	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 28			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 29			
1	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
4	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 30			
1	<i>In order to impact the future . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while discovering shape and space.</i>
4	<i>In order to predict what will happen . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while discovering shape and space.</i>
LESSON 31			
1	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to impact the future . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
LESSON 32			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while discovering shape and space.</i>
LESSON 33			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
4	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
LESSON 34			
1	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>



California Environmental Principles and Concepts (EP&C) Correlation

The Environmental Principles and Concepts (EP&C) reflect the fact that people depend on Earth’s natural systems. The goal of the EP&Cs is to help students understand the connections between people and the natural world. The table below lists the opportunities to address each Environmental Principle.

Principle 1: People Depend on Natural Systems

Concepts	Supported in
The continuation and health of individual human lives and of human communities and societies depend on the health of the natural systems that provide essential goods and ecosystem services. • Concept A The goods produced by natural systems are essential to human life and to the functioning of our economies and cultures. • Concept B The ecosystem services provided by natural systems are essential to human life and to the functioning of our economies and cultures. • Concept C That the quality, quantity, and reliability of the goods and ecosystem services provided by natural systems are directly affected by the health of those systems.	Data Talk: L11S3 Problems: L5S4, L7S4, L25S3

Principle 2: People Influence Natural Systems

Concepts	Supported in
The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies. • Concept A Direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems. • Concept B Methods used to extract, harvest, transport, and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural systems. • Concept C The expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems. • Concept D The legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.	Data Talk: L20S4 Problems: L2S2, L4S4, L10S2, L14S4, L15S3, L20S5, L24S2, L27S3, L28S2, L30S2, L33S5

Principle 3: Natural Systems Change in Ways that People Benefit From and Can Influence

Concepts	Supported in
Natural systems proceed through cycles that humans depend upon, benefit from, and can alter. • Concept A Natural systems proceed through cycles and processes that are required for their functioning. • Concept B Human practices depend upon and benefit from the cycles and processes that operate within natural systems. • Concept C Human practices can alter the cycles and processes that operate within natural systems.	Data Talk: L18S3 Problems: L13S3, L21S4, L22S4, L32S3

Principle 4: There are no Permanent or Impermeable Boundaries that Prevent Matter from Flowing Between Systems

Concepts	Supported in
The exchange of matter between natural systems and human societies affects the long-term functioning of both. • Concept A The effects of human activities on natural systems are directly related to the quantities of resources consumed and to the quantity and characteristics of the resulting byproducts. • Concept B The byproducts of human activity are not readily prevented from entering natural systems and may be beneficial, neutral, or detrimental in their effect. • Concept C The capacity of natural systems to adjust to human-caused alterations depends on the nature of the system as well as the scope, scale, and duration of the activity and the nature of its byproducts.	Data Talk: L13S3 Problems: L3S3, L11S4, L18S4

Principle 5: Decisions Affecting Resources and Natural Systems are Complex and Involve Many Factors

Concepts	Supported in
Decisions affecting resources and natural systems are based on a wide range of considerations and decision-making processes. • Concept A There is a spectrum of what is considered in making decisions about resources and natural systems and how those factors influence decisions. • Concept B The process of making decisions about resources and natural systems, and how the assessment of social, economic, political, and environmental factors has changed over time.	Data Talk: L7S3 Problems: L8S5, L9S4, L12S3, L16S3, L26S4, L29S3, L31S4, L34S3 Data Investigation: Unit 1