

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	
Represent and solve problems involving multiplication and division.	
3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i>	Focus: 4 Applied: 8, 9, 19
3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. <i>For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</i>	Focus: 10
3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Focus: 5, 6, 7, 17 Developing: 4 Applied: 8, 12, 15, 16, 18, 19, 28, 29, 32
3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. <i>For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = ? \div 3$, $6 \times 6 = ?$.</i>	Focus: 12 Applied: 17, 18

Standard	Lesson(s)
Operations and Algebraic Thinking <i>continued</i>	
Understand properties of multiplication and the relationship between multiplication and division.	
3.OA.5 Apply properties of operations as strategies to multiply and divide. <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i>	Focus: 5, 6, 7, 8 Applied: 9, 10, 12, 13, 16
3.OA.6 Understand division as an unknown-factor problem. <i>For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</i>	Focus: 11 Applied: 12, 17
Multiply and divide within 100.	
3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Focus: 5, 6, 7, 12 Applied: 9, 17, 18, 28, 29, 32
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	
3.OA.8 Solve two-step word problems using the four operations. 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: 18
3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. <i>For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</i>	Focus: 13
Number and Operations in Base Ten	
Use place value understanding and properties of operations to perform multi-digit arithmetic.	
3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	Focus: 1 Applied: 2, 3, 18, 27
3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Focus: 2, 3 Applied: 18, 28, 29
3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	Focus: 9

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Number and Operations – Fractions	
Develop understanding of fractions as numbers.	
3.NF.1 Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.	Focus: 20 Applied: 21, 22, 24, 33
3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line. b. Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a length $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line.	Focus: 21 Applied: 22, 23, 24, 25, 26 Focus: 21 Applied: 22, 23, 24, 25, 26
3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. Explain why the fractions are equivalent, e.g., by using a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. <i>Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.</i> d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	Focus: 22 Applied: 23 Focus: 23 Applied: 25, 33 Focus: 23 Focus: 24, 25 Applied: 33

Standard	Lesson(s)
Measurement and Data	
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	
3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Focus: 27
3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	Focus: 28, 29
Represent and interpret data.	
3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>	Focus: 19
3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	Focus: 26
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	
3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	Focus: 14 Focus: 14
3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	Focus: 14 Applied: 15

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Measurement and Data <i>continued</i>	
3.MD.7 Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.	Focus: 15 Applied: 16, 17, 32 Focus: 15 Applied: 16, 17, 32 Focus: 16 Focus: 16
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	
3.MD.8 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	Focus: 32
Geometry	
Reason with shapes and their attributes.	
3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	Focus: 30, 31 Applied: 32
3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.</i>	Focus: 33 Developing: 20



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 6, 7, 16, 18, 19, 27, 31. STEM Stories: William “Bill” Hewlett
2 Reason abstractly and quantitatively.	Embedded in all lessons. Targeted in Lessons 3, 8, 12, 17, 18, 28, 29, 32.
3 Construct viable arguments and critique the reasoning of others.	Embedded in all lessons. Targeted in Lesson 17. STEM Stories: Argelia Velez-Rodriguez
4 Model with mathematics.	Embedded in all Strategy lessons. Targeted in Lessons 3, 9, 19, 23, 26, 27, 28, 32, 33. STEM Stories: Mae Jemison
5 Use appropriate tools strategically.	Embedded in all Strategy lessons. Targeted in Lessons 1, 12, 18, 26, 31. STEM Stories: Grant Imahara
6 Attend to precision.	Embedded in all Strategy lessons. Targeted in Lessons 5, 7, 8, 19, 23.
7 Look for and make use of structure.	Embedded in all lessons. Targeted in Lessons 1, 2, 6, 7, 15, 16, 17, 25, 27, 32. STEM Stories: Rachel Carson
8 Look for and express regularity in repeated reasoning.	Embedded in all Strategy lessons. Targeted in Lessons 2, 3, 5, 6, 8, 15, 23, 29. STEM Stories: David Hayes-Bautista



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 Three-Digit Numbers: Place Value, Addition, and Subtraction		
Lesson 1 Use Place Value to Round Numbers	Focus: 3.NBT.1	Embedded: 1–8 Targeted: 5, 7
Lesson 2 Add Three-Digit Numbers	Focus: 3.NBT.2 Applied: 3.NBT.1	Embedded: 1–8 Targeted: 7, 8
Lesson 3 Subtract Three-Digit Numbers	Focus: 3.NBT.2 Applied: 3.NBT.1	Embedded: 1–8 Targeted: 2, 4, 8
Unit 2 Multiplication and Division: Concepts, Relationships, and Patterns		
Lesson 4 Understand the Meaning of Multiplication	Focus: 3.OA.1 Developing: 3.OA.3	Embedded: 2, 3, 7
Lesson 5 Multiply with 0, 1, 2, 5, and 10	Focus: 3.OA.3, 3.OA.5, 3.OA.7	Embedded: 1–8 Targeted: 6, 8
Lesson 6 Multiply with 3, 4, and 6	Focus: 3.OA.3, 3.OA.5, 3.OA.7	Embedded: 1–8 Targeted: 1, 7, 8
Lesson 7 Multiply with 7, 8, and 9	Focus: 3.OA.3, 3.OA.5, 3.OA.7	Embedded: 1–8 Targeted: 1, 6, 7
Lesson 8 Use Order and Grouping to Multiply	Focus: 3.OA.5 Applied: 3.OA.1, 3.OA.3	Embedded: 1–8 Targeted: 2, 6, 8
Lesson 9 Use Place Value to Multiply	Focus: 3.NBT.3 Applied: 3.OA.1, 3.OA.5, 3.OA.7	Embedded: 1–8 Targeted: 4
Lesson 10 Understand the Meaning of Division	Focus: 3.OA.2 Applied: 3.OA.5	Embedded: 2, 3, 7
Lesson 11 Understand How Multiplication and Division Are Connected	Focus: 3.OA.6	Embedded: 2, 3, 7
Lesson 12 Multiplication and Division Facts	Focus: 3.OA.4, 3.OA.7 Applied: 3.OA.3, 3.OA.5, 3.OA.6	Embedded: 1–8 Targeted: 2, 5
Lesson 13 Understand Patterns	Focus: 3.OA.9 Applied: 3.OA.5	Embedded: 2, 3, 7
Unit 3 Multiplication: Finding Area, Solving Word Problems, and Using Scaled Graphs		
Lesson 14 Understand Area	Focus: 3.MD.5, 3.MD.5.a, 3.MD.5.b, 3.MD.6	Embedded: 2, 3, 7
Lesson 15 Multiply to Find Area	Focus: 3.MD.7, 3.MD.7.a, 3.MD.7.b Applied: 3.OA.3, 3.MD.6	Embedded: 1–8 Targeted: 7, 8

Lesson	Standard(s)	SMP
Unit 3 Multiplication: Finding Area, Solving Word Problems, and Using Scaled Graphs <i>continued</i>		
Lesson 16 Add Areas	Focus: 3.MD.7.c, 3.MD.7.d Applied: 3.OA.3, 3.OA.5, 3.MD.7.a, 3.MD.7.b	Embedded: 1–8 Targeted: 1, 7
Lesson 17 Solve One-Step Word Problems Using Multiplication and Division	Focus: 3.OA.3 Applied: 3.OA.4, 3.OA.6, 3.OA.7, 3.MD.7.a, 3.MD.7.b	Embedded: 1–8 Targeted: 2, 3, 7
Lesson 18 Solve Two-Step Word Problems Using the Four Operations	Focus: 3.OA.8 Applied: 3.OA.3, 3.OA.4, 3.OA.7, 3.NBT.1, 3.NBT.2	Embedded: 1–8 Targeted: 1, 2, 5
Lesson 19 Scaled Graphs	Focus: 3.MD.3 Applied: 3.OA.1, 3.OA.3	Embedded: 1–8 Targeted: 1, 4, 6
Unit 4 Fractions: Equivalence and Comparison, Measurement, and Data		
Lesson 20 Understand What a Fraction Is	Focus: 3.NF.1 Developing: 3.G.2	Embedded: 2, 3, 7
Lesson 21 Understand Fractions on a Number Line	Focus: 3.NF.2.a, 3.NF.2.b Applied: 3.NF.1	Embedded: 2, 3, 7
Lesson 22 Understand Equivalent Fractions	Focus: 3.NF.3.a Applied: 3.NF.1, 3.NF.2.a, 3.NF.2.b	Embedded: 2, 3, 7
Lesson 23 Find Equivalent Fractions	Focus: 3.NF.3.b, 3.NF.3.c Applied: 3.NF.2.a, 3.NF.2.b, 3.NF.3.a	Embedded: 1–8 Targeted: 4, 6, 8
Lesson 24 Understand Comparing Fractions	Focus: 3.NF.3.d Applied: 3.NF.1, 3.NF.2.a, 3.NF.2.b	Embedded: 2, 3, 7
Lesson 25 Use Symbols to Compare Fractions	Focus: 3.NF.3.d Applied: 3.NF.2.a, 3.NF.2.b, 3.NF.3.b	Embedded: 1–8 Targeted: 7
Lesson 26 Measure Length and Plot Data on Line Plots	Focus: 3.MD.4 Applied: 3.NF.2.a, 3.NF.2.b	Embedded: 1–8 Targeted: 4, 5
Unit 5 Measurement: Time, Liquid Volume, and Mass		
Lesson 27 Time	Focus: 3.MD.1 Applied: 3.NBT.1	Embedded: 1–8 Targeted: 1, 4, 7
Lesson 28 Liquid Volume	Focus: 3.MD.2 Applied: 3.OA.3, 3.OA.7, 3.NBT.2	Embedded: 1–8 Targeted: 2, 4
Lesson 29 Mass	Focus: 3.MD.2 Applied: 3.OA.3, 3.OA.7, 3.NBT.2	Embedded: 1–8 Targeted: 2, 8
Unit 6 Shapes: Attributes and Categories, Perimeter and Area, and Partitioning		
Lesson 30 Understand Categories of Shapes	Focus: 3.G.1	Embedded: 2, 3, 7
Lesson 31 Classify Quadrilaterals	Focus: 3.G.1	Embedded: 1–8 Targeted: 1, 5
Lesson 32 Area and Perimeter of Shapes	Focus: 3.MD.8 Applied: 3.G.1, 3.OA.3, 3.OA.7, 3.MD.7.a, 3.MD.7.b	Embedded: 1–8 Targeted: 2, 4, 7
Lesson 33 Partition Shapes into Parts with Equal Areas	Focus: 3.G.2 Applied: 3.NF.1, 3.NF.3.b, 3.NF.3.d	Embedded: 1–8 Targeted: 4



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.3.1** *Exchanging information and ideas*, **ELD.PI.3.3** *Offering opinions*, **ELD.PI.3.5** *Listening actively*, **ELD.PI.3.6** *Reading/viewing closely*, and **ELD.PI.3.11** *Supporting opinions*.

Part I: Interacting in Meaningful Ways

ELD Standard	Supported In
Exchanging information and ideas	
ELD.PI.3.1.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: L1S3, L3S2, L3S3, L5S2, L5S3, L5S4, L6S2, L7S4, L8S1, L8S4, L8S5, L9S1, L9S3, L10S1, L10S2, L11S1, L11S2, L11S3, L13S1, L14S2, L15S3, L17S1, L17S4, L18S2, L19S1, L19S4, L20S2, L21S1, L22S2, L23S2, L23S3, L23S4, L24S1, L25S1, L26S1, L26S3, L26S4, L27S2, L27S5, L28S2, L28S3, L28S4, L30S2, L32S2, L32S3, L32S4, L33S1 Develop Academic Language: L1S3, L5S2, L6S2, L7S2, L8S2, L8S3, L13S2, L16S3, L23S3, L26S2, L28S3, L29S3, L32S3
ELD.PI.3.1.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.3.1.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.3.2.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, L4S2, L9S2, L16S1, L17S3, L18S1, L25S1, L26S1, L27S1, L30S3, L32S3, L32S4
ELD.PI.3.2.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.3.2.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.3.3.Em Offer opinions and negotiate with 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: L7S2, L9S1, L12S3, L14S3, L18S4, L23S5, L28S2, L29S1, L33S3 Develop Academic Language: L3S2, L3S2, L5S2, L17S3, L18S3, L19S4, L32S4
ELD.PI.3.3.Ex Offer opinions and negotiate with others in conversations using an expanded set of learned phrases (e.g., <i>I agree with X, and . . .</i>), as well as open responses in order to gain and/or hold the floor, provide counter-arguments, and the like.	
ELD.PI.3.3.Br Offer opinions and negotiate with others in conversations using a variety of learned phrases (e.g., <i>That's a good idea, but . . .</i>), as well as open responses in order to gain and/or hold the floor, provide counter-arguments, elaborate on an idea, and the like.	

Citation Key L = Lesson, S = Session

ELD Standard	Supported In
Adapting language choices	
ELD.PI.3.4.Em Recognize that language choices (e.g., vocabulary) vary according to social setting (e.g., playground versus classroom), with substantial support from peers or adults.	English Learner Differentiation: L5S4, L15S1, L24S1, L27S3 Develop Academic Language: L23S4, L29S2, L29S3
ELD.PI.3.4.Ex Adjust language choices (e.g., vocabulary, use of dialogue, and the like) according to purpose (e.g., persuading, entertaining), social setting, and audience, and audience (e.g., peers versus adults), with moderate support from peers or adults.	
ELD.PI.3.4.Br Adjust language choices according to purpose (e.g., persuading, entertaining), task, and audience (e.g., peer-to-peer versus peer-to-teacher), with light support from peers and adults.	
Listening actively	
ELD.PI.3.5.Em Demonstrate active listening to read-alouds and oral presentations by asking and answering basic questions, with prompting and substantial support.	English Learner Differentiation: L1S3, L2S1, L5S1, L16S2, L17S4, L17S5, L18S2, L19S4, L20S1, L21S3, L23S4, L25S3, L26S3, L28S4, L29S3, L30S2, L31S1, L32S5 Develop Academic Language: L2S2, L6S2, L27S2
ELD.PI.3.5.Ex Demonstrate active listening to read-alouds and oral presentations by asking and answering detailed questions, with occasional prompting and moderate support.	
ELD.PI.3.5.Br Demonstrate active listening to read-alouds and oral presentations by asking and answering detailed questions, with minimal prompting and light support.	
Reading/viewing closely	
ELD.PI.3.6.Em Describe ideas, phenomena (e.g., insect metamorphosis), and text elements (e.g., main idea, characters, setting) based on understanding of a select set of grade-level texts and viewing of multimedia, with substantial support.	English Learner Differentiation: L1S1, L1S3, L1S4, L2S2, L3S1, L4S1, L4S2, L5S3, L6S1, L6S4, L6S5, L7S3, L7S5, L8S2, L8S3, L9S2, L9S3, L10S1, L10S2, L10S3, L11S1, L11S2, L11S3, L12S2, L12S4, L13S1, L14S1, L15S2, L15S4, L16S3, L16S4, L18S3, L18S5, L19S2, L19S5, L21S1, L22S1, L22S2, L23S3, L24S3, L25S2, L25S3, L26S2, L26S3, L26S4, L27S4, L27S5, L28S1, L28S3, L28S4, L29S2, L29S3, L29S4, L30S1, L30S2, L32S2, L33S3 Develop Academic Language: L15S3, L18S2, L23S2, L23S4, L26S3, L28S3, L31S3
ELD.PI.3.6.Ex Describe ideas, phenomena (e.g., how cows digest food), and text elements (e.g., main idea, characters, events) in greater detail based on understanding of a variety of grade-level texts and viewing of multimedia, with moderate support.	
ELD.PI.3.6.Br Describe ideas, phenomena (e.g., volcanic eruptions), and text elements (e.g., central message, character traits, major events) using key details based on understanding of a variety of grade-level texts and viewing of multimedia, with light support.	
Evaluating language choices	
ELD.PI.3.7.Em Describe the language writers or speakers use to support an opinion or present an idea (e.g., by identifying the phrases or words in the text that provide evidence), with prompting and substantial support.	English Learner Differentiation: L6S3, L13S2, L15S1, L17S2, L17S5, L18S1, L18S5, L21S1, L21S3, L22S1, L22S3 Develop Academic Language: L7S4, L18S4, L25S2, L31S3, L33S2
ELD.PI.3.7.Ex 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 moderate support.	
ELD.PI.3.7.Br 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 light support.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Analyzing language choices	
ELD.PI.3.8.Em Distinguish how different words produce different effects on the audience (e.g., describing a character as <i>happy</i> versus <i>sad</i> .)	English Learner Differentiation: L3S5, L15S3, L19S3, L20S1, L21S2, L23S1, L27S4, L30S1, L31S2, L32S1 Develop Academic Language: L4S2, L8S4, L11S2, L16S2, L19S2, L27S3, L27S4, L28S2, L29S2, L30S2, L31S2
ELD.PI.3.8.Ex Distinguish how different words with similar meanings (e.g., describing a character as <i>happy</i> versus <i>ecstatic</i>) produce shades of meaning and different effects on the audience.	
ELD.PI.3.8.Br Distinguish how multiple different words with similar meanings (e.g., <i>pleased</i> versus <i>happy</i> versus <i>ecstatic</i> , <i>heard</i> versus <i>knew</i> versus <i>believed</i>) produce shades of meaning and different effects on the audience.	
Presenting	
ELD.PI.3.9.Em Plan and deliver very brief oral presentations (e.g., retelling a story, describing an animal, and the like).	Math in Action: Every unit; use Oral Presentation Checklist.
ELD.PI.3.9.Ex Plan and deliver very brief oral presentations on a variety of topics and content areas (e.g., retelling a story, explaining a science process, and the like)	
ELD.PI.3.9.Br Plan and deliver very brief oral presentations on a variety of topics and content areas (e.g., retelling a story, explaining a science process or historical event, and the like).	
Writing	
ELD.PI.3.10a.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: L1S2, L2S1, L3S2, L3S3, L3S5, L4S3, L5S1, L7S1, L14S3, L17S1, L22S1, L24S2, L28S1, L31S4
ELD.PI.3.10a.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.3.10a.Br Write longer literary and more detailed 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.PI.3.10b.Em Paraphrase texts and recount experiences using key words from notes or graphic organizers.	English Learner Differentiation: L6S3, L8S1, L9S2, L10S3, L12S1, L13S2, L13S3, L17S4, L18S1, L18S3, L18S5, L19S3, L20S2, L20S3, L21S2, L23S1, L24S1, L26S1, L27S3, L27S4, L32S1, L32S3, L32S4, L32S5, L33S2 Develop Academic Language: L33S2
ELD.PI.3.10b.Ex Paraphrase texts and recount experiences using complete sentences and key words from notes or graphic organizers.	
ELD.PI.3.10b.Br Paraphrase texts and recount experiences using increasingly detailed complete sentences and key words from notes or graphic organizers.	

ELD Standard	Supported In
Supporting opinions	
ELD.PI.3.11.Em Support opinions by providing good reasons and some textual evidence or relevant background knowledge (e.g., referring to textual evidence or knowledge of content).	English Learner Differentiation: L2S4, L7S1, L7S4, L8S3, L12S3, L16S2, L18S4, L24S3, L27S1, L28S2, L29S1, L31S3, L31S4, L32S5, L33S2, L33S3 Develop Academic Language: L7S4, L10S2, L12S2, L15S3, L17S3, L21S2, L22S2, L24S2, L32S4
ELD.PI.3.11.Ex Support opinions by providing good reasons and increasingly detailed textual evidence (e.g., providing examples from the text) or relevant background knowledge about the content.	
ELD.PI.3.11.Br Support opinions or persuade others by providing good reasons and detailed textual evidence (e.g., specific events or graphics from text) or relevant background knowledge about the content.	
Selecting language resources	
ELD.PI.3.12.Em Use a select number of general academic and domain-specific words to add detail (e.g., adding the word <i>dangerous</i> to describe a place, using the word <i>habitat</i> when describing animal behavior) while speaking and writing.	English Learner Differentiation: L1S4, L3S4, L4S1, L6S2, L6S5, L8S2, L9S1, L14S1, L14S2, L15S4, L17S2, L19S1, L20S1, L27S1, L27S2, L31S1, L31S3, L31S4, L32S1, L33S1 Develop Academic Language: L1S2, L2S3, L3S3, L3S4, L5S3, L6S3, L6S4, L7S3, L9S2, L12S3, L14S2, L15S2, L17S2, L17S4, L19S3, L20S2, L32S2 Build Your Vocabulary: Every unit Support Vocabulary Development: Every lesson, Session 1 Vocabulary Cards: Every unit
ELD.PI.3.12.Ex Use a growing number of general academic and domain-specific words in order to add detail, create an effect (e.g., adding the word <i>suddenly</i> to signal a change) or create shades of meaning (e.g., <i>scurry</i> versus <i>dash</i>) while speaking and writing.	
ELD.PI.3.12.Br Use a wide variety of general academic and domain-specific words, synonyms, antonyms, and non-literal language to create an effect, precision, and shades of meaning while speaking and writing.	

Part II: Learning About How English Works

ELD Standard	Supported In
Understanding text structure	
ELD.PII.3.1.Em Apply understanding of how different text types are organized to express ideas (e.g., how a story is organized sequentially) to comprehending texts and writing basic texts.	English Learner Differentiation: L1S2, L2S3, L3S4, L4S3, L16S2, L18S4, L27S3 Develop Academic Language: L18S4
ELD.PII.3.1.Ex Apply understanding of how different text types are organized to express ideas (e.g., how a story is organized sequentially with predictable stages) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.3.1.Br Apply understanding of how different text types are organized to express ideas (e.g., how a story is organized sequentially with predictable stages versus how opinion/arguments are structured logically, grouping related ideas) to comprehending texts and writing cohesive texts.	

Part II: Learning About How English Works *continued*

ELD Standard	Supported In
Understanding cohesion	
ELD.PII.3.2a.Em Apply basic understanding of language resources that refer 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: L3S1, L6S1, L6S4, L12S4, L16S1, L18S2, L30S3 Develop Academic Language: L18S2
ELD.PII.3.2a.Ex Apply growing understanding of language resources that refer the reader back or forward in text (e.g., how pronouns refer back to nouns in text) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.3.2a.Br Apply increasing understanding of language resources that refer the reader back or forward in text (e.g., how pronouns or synonyms refer back to nouns in text) to comprehending and writing cohesive texts.	
ELD.PII.3.2b.Em Apply basic understanding of how ideas, events, or reasons are linked throughout a text using everyday connecting words or phrases (e.g., <i>then, next</i>) to comprehending texts and writing basic texts.	English Learner Differentiation: L8S3, L8S4, L12S1, L16S3, L17S3, L24S2, L26S2, L29S4, L32S2 Develop Academic Language: L26S2
ELD.PII.3.2b.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>at the beginning/end, first/next</i>) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.3.2b.Br Apply increasing understanding of how ideas, events, or reasons are linked throughout a text using an increasing variety of connecting and transitional words or phrases (e.g., <i>for example, afterward, first/next/last</i>) to comprehending texts and writing cohesive texts.	
Using verbs and verb phrases	
ELD.PII.3.3.Em Use frequently used verbs, different verb types, (e.g., doing, saying, being/having, thinking/feeling), and verb tenses appropriate to the text type and discipline to convey time (e.g., simple past for recounting and experience).	English Learner Differentiation: L8S4, L8S5, L22S3, L26S2, L28S1, L29S2 Develop Academic Language: L3S3, L6S4, L8S4, L16S2, L17S4, L20S2, L26S3, L28S2, L30S2
ELD.PII.3.3.Ex Use a growing number of verb types (e.g., doing, saying, being/having, thinking/feeling), and verb tenses appropriate to the text type and discipline to convey time (e.g., simple past for retelling, simple present for science description).	
ELD.PII.3.3.Br Use a variety of verb types, (e.g., doing, saying, being/having, thinking/feeling), and verb tenses appropriate to the text type and discipline to convey time (e.g., simple present for a science description, simple future to predict).	
Using nouns and noun phrases	
ELD.PII.3.4.Em Expand noun phrases in simple ways (e.g., adding an adjective to a noun) in order to enrich the meaning of sentences and add details about ideas, people, things, and the like.	English Learner Differentiation: L2S2, L7S3, L7S5, L12S1, L15S4, L17S2, L19S5, L25S2, L30S1, L31S2
ELD.PII.3.4.Ex Expand noun phrases in a growing number of ways (e.g., adding comparative/ superlative adjectives to nouns) in order to enrich the meaning of sentences and add details about ideas, people, things, and the like.	
ELD.PII.3.4.Br Expand noun phrases in a variety of ways (e.g., adding comparative/ superlative adjectives to noun phrases, simple clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, things, and the like.	

ELD Standard	Supported In
Modifying to add details	
ELD.PII.3.5.Em Expand sentences with adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause, and the like) about a familiar activity or process (e.g., They walked <i>to the soccer field</i>).	English Learner Differentiation: L1S1, L21S3, L22S3, L31S2 Develop Academic Language: L7S2, L8S3, L23S2, L23S3, L32S3
ELD.PII.3.5.Ex Expand sentences with adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause, and the like) 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.3.5.Br Expand sentences with adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause, and the like) about a range of familiar and new activities or processes (e.g., They worked <i>quietly all night in their room</i>).	
Connecting ideas	
ELD.PII.3.6.Em Combine clauses in a few basic ways to make connections between and join ideas (e.g., creating compound sentences using <i>and, but, so</i>).	English Learner Differentiation: L1S2, L2S4, L3S1, L3S3, L7S2, L12S2, L13S3, L14S3, L15S2, L19S2, L29S1, L31S3 Develop Academic Language: L27S3
ELD.PII.3.6.Ex Combine clauses in an increasing variety of ways (e.g., creating compound and complex sentences) to make connections between and join ideas (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.3.6.Br Combine clauses in a wide variety of ways (e.g., creating compound and complex sentences) to make connections between and join ideas, for example, to express cause/effect (e.g., <i>The deer ran because the mountain lion approached them</i>), to make a concession (e.g., <i>She studied all night even though she wasn't feeling well</i>), 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.3.7.Em Condense clauses in simple ways (e.g., changing: <i>It's green. It's red.</i> → <i>It's green and red</i>) to create precise and detailed sentences.	English Learner Differentiation: L7S3, L15S1, L16S4, L20S3, L23S5, L33S2
ELD.PII.3.7.Ex Condense clauses in a growing number of ways (e.g., through embedded clauses as in, <i>It's a plant. It's found in the rain forest.</i> → <i>It's a green and red plant that's found in the tropical rain forest</i>) to create precise and detailed sentences.	
ELD.PII.3.7.Br Condense clauses in a variety of ways (e.g., through embedded clauses and other condensing as in, <i>It's a plant. It's green and red. It's found in the tropical rain forest.</i> → <i>It's a green and red plant that's found in the tropical rain forest</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)
Analyze Quadrilaterals	Unit 6: Lessons 30, 31, 32
Fractions as Relationships	Unit 4: Lessons 20, 22, 23, 24
Fractions of Shape and Time	Unit 6: Lesson 33
Measuring	Unit 4: Lesson 26 Unit 5: Lessons 28, 29
Number Flexibility to 100 for All Four Operations	Unit 1: Lesson 1 Unit 2: Lessons 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 Unit 3: Lessons 17, 18 Unit 5: Lessons 27, 28, 29
Patterns in Four Operations	Unit 1: Lessons 2, 3 Unit 3: Lesson 18
Represent Multivariable Data	Unit 3: Lesson 19
Square Tiles	Unit 2: Lessons 6, 7 Unit 3: Lessons 14, 15, 16
Unit Fraction Models	Unit 4: Lessons 21, 25

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 1			
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 2			
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 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>
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 exploring changing quantities.</i>
LESSON 3			
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>
4	<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 make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</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 exploring changing quantities.</i>
3	<i>In order to predict what could happen ...</i>	<i>students will construct viable arguments and critique the reasoning of others ...</i>	<i>while exploring changing quantities.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 6			
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>
4	<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 7			
1	<i>In order to impact the future . . .</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 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 8			
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 predict what could happen . . .</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>
4	<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 9			
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 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 12			
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>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 15			
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 predict what could 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 16			
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 17			
1	<i>In order to predict what could happen ...</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>
4	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while exploring changing quantities.</i>
LESSON 18			
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 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>
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 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 19			
1	<i>In order to predict what could happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
2	<i>In order to predict what could happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 19 <i>continued</i>			
3	<i>In order to predict what could happen ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
4	<i>In order to impact the future ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
LESSON 23			
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 taking wholes apart, putting parts together.</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 taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will look for and express regularity in repeated reasoning ...</i>	<i>while taking wholes apart, putting parts together.</i>
4	<i>In order to make sense of the world ...</i>	<i>students will look for and express regularity in repeated reasoning ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 25			
1	<i>In order to predict what could happen ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to predict what could happen ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 26			
1	<i>In order to impact the future ...</i>	<i>students will use appropriate tools strategically ...</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 impact the future ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
LESSON 27			
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 predict what could 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 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>
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>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 28			
1	<i>In order to impact the future . . .</i>	<i>students will construct viable arguments and critique the reasoning of others . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to impact the future . . .</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>
LESSON 29			
1	<i>In order to impact the future . . .</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 use appropriate tools strategically . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while reasoning with data.</i>
LESSON 31			
1	<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>
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>
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 impact the future . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while discovering shape and space.</i>
4	<i>In order to impact the future . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while discovering shape and space.</i>
LESSON 33			
1	<i>In order to impact the future . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to impact the future . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</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: L28S3, L31S3 Problems: L8S5, L19S4, L23S5, L26S2

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: L18S4 Problems: L2S4, L5S4, L7S4, L15S4, L29S4, L31S4, L32S5 Data Investigation: Unit 1

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: L26S3 Problems: L3S5, L12S4, L16S4, L25S3, L28S4

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: L3S4, L23S4 Problems: L9S3, L18S3

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: L12S3 Problems: L1S4, L6S5, L17S3, L27S4, L33S3