

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	
Write and interpret numerical expressions.	
5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Focus: 30 Developing: 3, 8
5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.</i>	Focus: 30
5.OA.2.1 Express a whole number in the range 2–50 as a product of its prime factors. <i>For example, find the prime factors of 24 and express 24 as $2 \times 2 \times 2 \times 3$.</i>	Focus: 34
Analyze patterns and relationships.	
5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i>	Focus: 33

Standard	Lesson(s)
Number and Operations in Base Ten	
Understand the place value system.	
5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.	Focus: 6 Applied: 7, 15, 16, 17
5.NBT.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	Focus: 7 Applied: 25, 26
5.NBT.3 Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times \left(\frac{1}{10}\right) + 9 \times \left(\frac{1}{100}\right) + 2 \times \left(\frac{1}{1000}\right)$. b. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Focus: 8 Focus: 9
5.NBT.4 Use place value understanding to round decimals to any place.	Focus: 9 Applied: 14
Perform operations with multi-digit whole numbers and with decimals to hundredths.	
5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Focus: 4 Developing: 3 Applied: 26
5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Focus: 5 Applied: 25, 26
5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Focus: 10, 11, 14, 15, 16, 17
Number and Operations – Fractions	
Use equivalent fractions as a strategy to add and subtract fractions.	
5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$.</i> (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)	Focus: 12, 13 Applied: 14, 27
5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$.</i>	Focus: 12, 13, 14 Applied: 27

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Number and Operations – Fractions <i>continued</i>	
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	
5.NF.3 Interpret a fraction as division of the numerator by the denominator ($\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i>	Focus: 18 Applied: 25, 26
5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product $(\frac{a}{b}) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. <i>For example, use a visual fraction model to show $(\frac{2}{3}) \times 4 = \frac{8}{3}$, and create a story context for this equation. Do the same with $(\frac{2}{3}) \times (\frac{4}{5}) = \frac{8}{15}$. (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$.)</i> b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	Focus: 19 Applied: 20, 22 Focus: 20 Applied: 22
5.NF.5 Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $\frac{a}{b} = \frac{(n \times a)}{(n \times b)}$ to the effect of multiplying $\frac{a}{b}$ by 1.	Focus: 21 Focus: 21
5.NF.6 Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	Focus: 22 Developing: 20 Applied: 26, 27

Standard	Lesson(s)
Number and Operations – Fractions <i>continued</i>	
Apply and extend previous understandings of multiplication and division to multiply and divide fractions. <i>continued</i>	
5.NF.7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(\frac{1}{3}) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(\frac{1}{3}) \div 4 = \frac{1}{12}$ because $(\frac{1}{12}) \times 4 = \frac{1}{3}$. b. Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for $4 \div (\frac{1}{5})$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$.</i> c. Solve real-world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{1}{3}$-cup servings are in 2 cups of raisins?</i>	Applied: 27 Focus: 23 Applied: 24 Focus: 23 Applied: 24 Focus: 24
Measurement and Data	
Convert like measurement units within a given measurement system.	
5.MD.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real-world problems.	Focus: 25, 26
Represent and interpret data.	
5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}, \frac{1}{4}, \frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. <i>For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.</i> Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.	Focus: 27
5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.	Focus: 1 Applied: 2 Focus: 1 Applied: 2

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Measurement and Data <i>continued</i>	
Represent and interpret data. <i>continued</i>	
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Focus: 2 Developing: 1
5.MD.5 Relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole number products as volumes, e.g., to represent the associative property of multiplication. b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems. c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real-world problems.	Developing: 1 Focus: 2, 3 Applied: 4 Focus: 3 Applied: 4, 5 Focus: 3
Geometry	
Graph points on the coordinate plane to solve real-world and mathematical problems.	
5.G.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	Focus: 31 Applied: 32
5.G.2 Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	Focus: 32 Developing: 31 Applied: 33
5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	Focus: 28 Applied: 29
5.G.4 Classify two-dimensional figures in a hierarchy based on properties.	Focus: 29 Developing: 28



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 5, 17, 26, 27, 30. STEM Stories: Dolores “Dolly” Garza
2 Reason abstractly and quantitatively.	Embedded in all lessons. Targeted in Lessons 3, 9, 12, 16, 17, 18, 20, 22, 24, 25, 27.
3 Construct viable arguments and critique the reasoning of others.	Embedded in all lessons. Targeted in Lesson 8. STEM Stories: José Celso Barbosa
4 Model with mathematics.	Embedded in all Strategy lessons. Targeted in Lessons 4, 11, 13, 22, 33.
5 Use appropriate tools strategically.	Embedded in all Strategy lessons. Targeted in Lessons 10, 14. STEM Stories: Abraham “Abe” Nemeth
6 Attend to precision.	Embedded in all Strategy lessons. Targeted in Lessons 2, 9, 11, 14, 26, 30. STEM Stories: Swati Mohan
7 Look for and make use of structure.	Embedded in all lessons. Targeted in Lessons 3, 5, 8, 12, 13, 15, 16, 20, 25, 29, 32, 33, 34.
8 Look for and express regularity in repeated reasoning.	Embedded in all Strategy lessons. Targeted in Lessons 4, 5, 17, 24. STEM Stories: Gerald “Jerry” Lawson



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 Number Operations and Applications: Volume, Multiplication, and Division		
Lesson 1 Understand Volume	Focus: 5.MD.3.a, 5.MD.3.b Developing: 5.MD.4, 5.MD.5	Embedded: 2, 3, 7
Lesson 2 Find Volume Using Unit Cubes	Focus: 5.MD.4, 5.MD.5.a Applied: 5.MD.3.a, 5.MD.3.b	Embedded: 1–8 Targeted: 6
Lesson 3 Find Volume Using Formulas	Focus: 5.MD.5.a, 5.MD.5.b, 5.MD.5.c Developing: 5.NBT.5, 5.OA.1	Embedded: 1–8 Targeted: 2, 7
Lesson 4 Multiply Multi-Digit Numbers	Focus: 5.NBT.5 Applied: 5.MD.5.a, 5.MD.5.b	Embedded: 1–8 Targeted: 4, 8
Lesson 5 Divide Multi-Digit Numbers	Focus: 5.NBT.6 Applied: 5.MD.5.b	Embedded: 1–8 Targeted: 1, 7, 8
Unit 2 Decimals and Fractions: Place Value, Addition, and Subtraction		
Lesson 6 Understand Decimal Place Value	Focus: 5.NBT.1	Embedded: 2, 3, 7
Lesson 7 Understand Powers of 10	Focus: 5.NBT.2 Applied: 5.NBT.1	Embedded: 2, 3, 7
Lesson 8 Read and Write Decimals	Focus: 5.NBT.3.a Developing: 5.OA.1	Embedded: 1–8 Targeted: 3, 7
Lesson 9 Compare and Round Decimals	Focus: 5.NBT.3.b, 5.NBT.4	Embedded: 1–8 Targeted: 2, 6
Lesson 10 Add Decimals	Focus: 5.NBT.7	Embedded: 1–8 Targeted: 5
Lesson 11 Subtract Decimals	Focus: 5.NBT.7	Embedded: 1–8 Targeted: 4, 6
Lesson 12 Add Fractions	Focus: 5.NF.1, 5.NF.2	Embedded: 1–8 Targeted: 2, 7
Lesson 13 Subtract Fractions	Focus: 5.NF.1, 5.NF.2	Embedded: 1–8 Targeted: 4, 7
Lesson 14 Add and Subtract in Word Problems	Focus: 5.NBT.7, 5.NF.2 Applied: 5.NF.1, 5.NBT.4	Embedded: 1–8 Targeted: 5, 6

Lesson	Standard(s)	SMP
Unit 3 More Decimals and Fractions: Multiplication and Division		
Lesson 15 Multiply a Decimal by a Whole Number	Focus: 5.NBT.7 Applied: 5.NBT.1	Embedded: 1–8 Targeted: 7
Lesson 16 Multiply Decimals	Focus: 5.NBT.7 Applied: 5.NBT.1	Embedded: 1–8 Targeted: 2, 7
Lesson 17 Divide Decimals	Focus: 5.NBT.7 Applied: 5.NBT.1	Embedded: 1–8 Targeted: 1, 2, 8
Lesson 18 Fractions as Division	Focus: 5.NF.3	Embedded: 1–8 Targeted: 2
Lesson 19 Understand Multiplication by a Fraction	Focus: 5.NF.4.a	Embedded: 2, 3, 7
Lesson 20 Multiply Fractions to Find Area	Focus: 5.NF.4.b Developing: 5.NF.6 Applied: 5.NF.4.a	Embedded: 1–8 Targeted: 2, 7
Lesson 21 Understand Multiplication as Scaling	Focus: 5.NF.5.a, 5.NF.5.b	Embedded: 2, 3, 7
Lesson 22 Multiply Fractions in Word Problems	Focus: 5.NF.6 Applied: 5.NF.4.a, 5.NF.4.b	Embedded: 1–8 Targeted: 2, 4
Lesson 23 Understand Division with Unit Fractions	Focus: 5.NF.7.a, 5.NF.7.b	Embedded: 2, 3, 7
Lesson 24 Divide Unit Fractions in Word Problems	Focus: 5.NF.7.c Applied: 5.NF.7.a, 5.NF.7.b	Embedded: 1–8 Targeted: 2, 8
Unit 4 Measurement, Data, and Geometry: Converting Units, Using Data, and Classifying Figures		
Lesson 25 Convert Measurement Units	Focus: 5.MD.1 Applied: 5.NBT.2, 5.NBT.6, 5.NF.3	Embedded: 1–8 Targeted: 2, 7
Lesson 26 Solve Word Problems Involving Conversions	Focus: 5.MD.1 Applied: 5.NBT.2, 5.NBT.5, 5.NBT.6, 5.NF.3, 5.NF.6	Embedded: 1–8 Targeted: 1, 6
Lesson 27 Make Line Plots and Interpret Data	Focus: 5.MD.2 Applied: 5.NF.1, 5.NF.2, 5.NF.6, 5.NF.7	Embedded: 1–8 Targeted: 1, 2
Lesson 28 Understand Categories of Two-Dimensional Figures	Focus: 5.G.3 Developing: 5.G.4	Embedded: 2, 3, 7
Lesson 29 Classify Two-Dimensional Figures	Focus: 5.G.4 Applied: 5.G.3	Embedded: 1–8 Targeted: 7
Unit 5 Algebraic Thinking and the Coordinate Plane: Expressions, Graphing Points, Patterns and Relationships		
Lesson 30 Evaluate, Write, and Interpret Expressions	Focus: 5.OA.1, 5.OA.2	Embedded: 1–8 Targeted: 1, 6
Lesson 31 Understand the Coordinate Plane	Focus: 5.G.1 Developing: 5.G.2	Embedded: 2, 3, 7
Lesson 32 Represent Problems in the Coordinate Plane	Focus: 5.G.2 Applied: 5.G.1	Embedded: 1–8 Targeted: 7
Lesson 33 Analyze Patterns and Relationships	Focus: 5.OA.3 Applied: 5.G.2	Embedded: 1–8 Targeted: 4, 7
Lesson 34 Find Prime Factors	Focus: 5.OA.2.1	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.5.1** *Exchanging information/ideas*, **ELD.PI.5.3** *Offering opinions*, **ELD.PI.5.5** *Listening actively*, **ELD.PI.5.6** *Reading/viewing closely*, and **ELD.PI.5.11** *Supporting opinions*.

Part I: Interacting in Meaningful Ways

ELD Standard	Supported In
Exchanging information/ideas	
ELD.PI.5.1.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: L1S1, L2S2, L3S1, L3S4, L4S2, L8S1, L8S2, L8S3, L11S2, L11S4, L12S3, L12S4, L13S1, L13S3, L14S1, L15S2, L16S3, L16S4, L17S1, L17S5, L18S1, L20S3, L22S2, L23S1, L24S2, L24S4, L25S2, L25S4, L26S3, L27S1, L27S2, L28S1, L28S2, L29S3, L30S3, L30S4, L31S3, L32S4, L33S2 Develop Academic Language: L1S2, L2S2, L3S2, L4S3, L5S3, L11S3, L16S3, L20S2, L23S2, L24S2, L24S3, L25S3, L29S2
ELD.PI.5.1.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.5.1.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.5.2.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: L5S4, L6S3, L8S2, L11S1, L13S4, L14S2, L15S2, L18S1, L19S2, L22S3, L22S4, L23S3, L24S1, L26S1, L27S2, L29S4, L33S1 Develop Academic Language: L18S2
ELD.PI.5.2.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.5.2.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.5.3.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: L5S2, L9S1, L10S2, L10S3, L13S2, L14S3, L15S3, L22S1, L22S3, L23S2, L25S3 Develop Academic Language: L4S3, L6S2, L14S2, L17S2, L18S2, L20S2, L22S2, L27S2, L30S3
ELD.PI.5.3.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 Soundshold the floor, provide counterarguments, and so on.	
ELD.PI.5.3.Br Negotiate with or persuade others in conversations using a variety of learned phrases (e.g., <i>That’s an interesting 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.5.4.Em Adjust language choices according to social setting (e.g., playground, classroom) and audience (e.g., peers, teacher), with substantial support.	English Learner Differentiation: L6S2, L7S1, L12S2, L18S2, L29S1, L30S2 Develop Academic Language: L13S2, L14S2, L14S3, L17S4, L26S2
ELD.PI.5.4.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.5.4.Br Adjust language choices according to purpose, task (e.g., facilitating a science experiment), and audience, with light support.	
Listening actively	
ELD.PI.5.5.Em Demonstrate active listening of read-alouds and oral presentations by asking and answering basic questions, with prompting and substantial support.	English Learner Differentiation: L3S3, L4S3, L7S3, L8S3, L11S3, L30S1, L33S1, L34S1 Develop Academic Language: L2S2, L9S2, L10S2, L11S3
ELD.PI.5.5.Ex Demonstrate active listening of read-alouds and oral presentations by asking and answering detailed questions, with occasional prompting and moderate support.	
ELD.PI.5.5.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.5.6a.Em Explain ideas, phenomena, processes, and text relationships (e.g., compare/contrast, cause/effect, problem/solution) based on close reading of a variety of grade-level texts and viewing of multimedia, with substantial support.	English Learner Differentiation: L1S2, L2S3, L3S2, L3S3, L3S4, L4S1, L4S2, L4S4, L5S5, L7S3, L8S4, L9S2, L9S4, L10S2, L11S2, L11S3, L12S1, L13S2, L13S3, L13S4, L14S1, L14S4, L16S4, L17S4, L17S5, L18S3, L20S1, L20S3, L21S2, L21S3, L22S2, L24S1, L24S2, L24S3, L24S4, L26S2, L26S4, L29S3, L30S1, L31S2, L31S3, L32S1, L32S2, L32S4, L33S2, L33S3, L33S4, L34S2 Develop Academic Language: L7S2, L13S3, L19S2, L21S2, L23S2
ELD.PI.5.6a.Ex Explain ideas, phenomena, processes, and text relationships (e.g., compare/contrast, cause/effect, problem/solution) based on close reading of a variety of grade-level texts and viewing of multimedia, with moderate support.	
ELD.PI.5.6a.Br Explain ideas, phenomena, processes, and text relationships (e.g., compare/contrast, cause/effect, problem/solution) based on close reading of a variety of grade-level texts and viewing of multimedia, with light support.	
ELD.PI.5.6b.Em Use knowledge of frequently-used affixes (e.g., <i>un-</i> , <i>mis-</i>), linguistic context, reference materials, and visual cues to determine the meaning of unknown words on familiar topics.	English Learner Differentiation: L4S1, L6S1, L27S4, L28S2 Develop Academic Language: L4S2, L15S2, L25S2, L26S3, L28S2, L29S3
ELD.PI.5.6b.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 and new topics.	
ELD.PI.5.6b.Br 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 and new topics.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Evaluating language choices	
ELD.PI.5.7.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: L5S3, L5S4, L6S3, L15S3
ELD.PI.5.7.Ex Explain how well writers and speakers use language resources to support an opinion or present an idea (e.g., whether the vocabulary used to provide evidence is strong enough, or if the phrasing used to signal a shift in meaning does this well), with moderate support.	
ELD.PI.5.7.Br Explain 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 provide evidence or describe characters, or if the phrasing used to introduce a topic is appropriate), with light support.	
Analyzing language choices	
ELD.PI.5.8.Em Distinguish how different words with similar meanings produce different effects on the audience (e.g., describing a character as <i>angry</i> versus <i>furious</i>).	English Learner Differentiation: L2S1, L7S1, L17S5, L18S2, L29S1, L30S3 Develop Academic Language: L3S3, L8S2, L9S2, L10S2, L17S4, L33S3
ELD.PI.5.8.Ex Distinguish how different words with similar meanings (e.g., describing an event as <i>sad</i> versus <i>tragic</i>) and figurative language (e.g., <i>she ran like a cheetah</i>) produce shades of meaning and different effects on the audience.	
ELD.PI.5.8.Br Distinguish how different words with related meanings (e.g., <i>fun</i> versus <i>thrilling</i> , <i>possibly</i> versus <i>certainly</i>) and figurative language (e.g., <i>the stream slithered through the parched land</i>) produce shades of meaning and different effects on the audience.	
Presenting	
ELD.PI.5.9.Em Plan and deliver brief oral presentations on a variety of topics and content areas (e.g., providing a report on a current event, reciting a poem, recounting an experience, explaining a science process), with moderate support, such as graphic organizers.	Math in Action: Every unit; use Oral Presentation Checklist.
ELD.PI.5.9.Ex Plan and deliver longer oral presentations on a variety of topics and content areas (e.g., providing an opinion speech on a current event, reciting a poem, recounting an experience, explaining a science process), with moderate support.	
ELD.PI.5.9.Br Plan and deliver oral presentations on a variety of topics in a variety of content areas (e.g., providing an opinion speech on a current event, reciting a poem, recounting an experience, explaining a science process), with light support.	

ELD Standard	Supported In
Writing	
ELD.PI.5.10a.Em Write short literary and informational texts (e.g., a description of a camel) collaboratively (e.g., joint construction of texts with an adult or with peers) and sometimes independently.	English Learner Differentiation: L1S3, L7S2, L9S3, L10S1, L14S2, L15S1, L16S1, L16S2, L17S2, L18S3, L19S3, L20S2, L21S2, L25S1, L25S3, L26S2, L27S3, L28S3, L30S4, L31S1, L32S3, L32S4, L33S3
ELD.PI.5.10a.Ex Write longer literary and informational texts (e.g., an informative report on different kinds of camels) collaboratively (e.g., joint construction of texts with an adult or with peers) and with increasing independence by using appropriate text organization.	
ELD.PI.5.10a.Br Write longer and more detailed literary and informational texts (e.g., an explanation of how camels survive without water for a long time) collaboratively (e.g., joint construction of texts with an adult or with peers) and independently by using appropriate text organization and growing understanding of register.	
ELD.PI.5.10b.Em Write brief summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	English Learner Differentiation: L3S1, L5S3, L16S2, L19S1, L20S4, L29S4
ELD.PI.5.10b.Ex Write increasingly concise summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	
ELD.PI.5.10b.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.5.11a.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: L2S3, L5S2, L13S2, L14S4, L17S3, L22S1, L22S3, L25S3, L27S3, L29S2 Develop Academic Language: L5S3, L6S2, L7S2, L19S2, L27S2
ELD.PI.5.11a.Ex Support opinions or persuade others by expressing appropriate/accurate reasons using some textual evidence (e.g., paraphrasing facts from a text) or relevant background knowledge about content, with moderate support.	
ELD.PI.5.11a.Br Support opinions or persuade others by expressing appropriate/accurate reasons using detailed textual evidence (e.g., quoting the text directly or specific events from text) or relevant background knowledge about content, with mild support.	
ELD.PI.5.11b.Em Express ideas and opinions or temper statements using basic modal expressions (e.g., <i>can, has to, maybe</i>).	English Learner Differentiation: L9S1, L10S3, L14S3 Develop Academic Language: L22S2
ELD.PI.5.11b.Ex Express attitude and opinions or temper statements with familiar modal expressions (e.g., <i>maybe/probably, can/must</i>).	
ELD.PI.5.11b.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>).	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Selecting language resources	
ELD.PI.5.12a.Em Use a select number of general academic and domain-specific words to create precision while speaking and writing.	English Learner Differentiation: L1S1, L1S2, L2S2, L4S3, L4S4, L5S1, L5S2, L5S5, L6S1, L7S2, L8S2, L9S2, L10S1, L10S2, L11S4, L12S2, L12S3, L14S2, L15S1, L16S1, L16S2, L16S3, L17S1, L17S2, L19S1, L20S1, L21S1, L23S3, L24S1, L24S3, L25S2, L26S1, L26S3, L27S1, L27S4, L28S1, L28S2, L29S1, L30S2, L30S4, L31S1, L31S2, L31S3, L32S1, L33S3, L34S1 Develop Academic Language: L3S3, L5S2, L5S4, L8S2, L8S3, L9S3, L11S2, L12S3, L13S2, L16S2, L17S3, L20S3, L22S3, L24S3, L27S3, L30S2, L31S2, L32S2, L32S3, L33S2, L34S2 Build Your Vocabulary: Every unit Support Vocabulary Development: Every lesson, Session 1 Vocabulary Cards: Every unit
ELD.PI.5.12a.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.5.12a.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.	
ELD.PI.5.12b.Em Select a few frequently used affixes for accuracy and precision (e.g., She walks, I'm <i>unhappy</i>).	English Learner Differentiation: L2S1, L6S2, L13S4 Develop Academic Language: L12S2, L25S2, L26S3
ELD.PI.5.12b.Ex Select a growing number of frequently used affixes for accuracy and precision (e.g., She walked. He likes . . . , I'm <i>unhappy</i>).	
ELD.PI.5.12b.Br Select a variety of appropriate affixes for accuracy and precision (e.g., She's walking. I'm <i>uncomfortable</i> . They left reluctant/y).	

Part II: Learning About How English Works

ELD Standard	Supported In
Understanding text structure	
ELD.PII.5.1.Em Apply basic 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 organized around ideas) to comprehending texts and writing basic texts.	English Learner Differentiation: L1S3, L11S1, L12S4, L18S3, L19S2, L19S3, L22S4, L23S3
ELD.PII.5.1.Ex Apply growing 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 around reasons and evidence) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.5.1.Br Apply increasing understanding of how different text types are organized to express ideas (e.g., how a historical account is organized chronologically versus how opinions/arguments are structured logically around reasons and evidence) to comprehending texts and writing cohesive texts.	

Citation Key L = Lesson, S = Session

ELD Standard	Supported In
Understanding cohesion	
ELD.PII.5.2a.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: L8S4, L9S4, L13S1, L25S4, L26S4, L29S2, L34S2
ELD.PII.5.2a.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.5.2a.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.PII.5.2b.Em Apply basic understanding of how ideas, events, or reasons are linked throughout a text using a select set of everyday connecting words or phrases (e.g., <i>first/next, at the beginning</i>) to comprehending texts and writing basic texts.	English Learner Differentiation: L5S3, L11S1, L12S3, L17S2, L20S2, L30S2 Develop Academic Language: L24S2
ELD.PII.5.2b.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>for example, in the first place, as a result</i>) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.5.2b.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>consequently, specifically, however</i>) to comprehending texts and writing cohesive texts.	
Using verbs and verb phrases	
ELD.PII.5.3.Em Use frequently used verbs (e.g., take, like, eat) and various 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) on familiar topics.	English Learner Differentiation: L3S2, L4S3, L7S3, L16S1, L20S4, L21S1, L26S4 Develop Academic Language: L12S3
ELD.PII.5.3.Ex Use various 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 recounting an experience, timeless present for a science description) on an increasing variety of topics.	
ELD.PII.5.3.Br Use various 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 description, mixture of past and present for narrative or history explanation) on a variety of topics.	
Using nouns and noun phrases	
ELD.PII.5.4.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: L2S1, L2S3, L4S1, L5S1, L6S1, L12S1, L14S1, L17S4, L33S4 Develop Academic Language: L5S4, L14S3, L29S2
ELD.PII.5.4.Ex Expand noun phrases in a variety of ways (e.g., adding comparative/superlative adjectives to noun phrases or simple clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, things, and the like.	
ELD.PII.5.4.Br Expand noun phrases in an increasing variety of ways (e.g., adding comparative/superlative and general academic adjectives to noun phrases or more complex clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, things, and the like.	

Part II: Learning About How English Works *continued*

ELD Standard	Supported In
Modifying to add details	
ELD.PII.5.5.Em Expand and enrich 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.	English Learner Differentiation: L8S1, L9S3, L25S1, L28S3 Develop Academic Language: L16S3
ELD.PII.5.5.Ex Expand and enrich 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.	
ELD.PII.5.5.Br Expand and enrich sentences with adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause, and the like) about a variety of familiar and new activities and processes.	
Connecting ideas	
ELD.PII.5.6.Em Combine clauses in a few basic ways to make connections between and join ideas (e.g., You must X because X) or to provide evidence to support ideas or opinions (e.g., creating compound sentences using <i>and</i> , <i>but</i> , <i>so</i>).	English Learner Differentiation: L3S2, L4S2, L17S3, L29S2, L29S4, L32S1, L34S1 Develop Academic Language: L3S2, L17S2
ELD.PII.5.6.Ex Combine clauses in an increasing 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 came</i>), to make a concession (e.g., <i>She studied all night even though she wasn't feeling well</i>), or to provide reasons to support ideas (e.g., X is an <i>extremely good book because ____</i>).	
ELD.PII.5.6.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>), to link two ideas that happen at the same time (e.g., <i>The cubs played while their mother hunted</i>), or to provide reasons to support ideas (e.g., <i>The author persuades the reader by ____</i>).	
Condensing ideas	
ELD.PII.5.7.Em Condense clauses in simple ways (e.g., through simple embedded clauses as in, <i>The book is on the desk. The book is mine.</i> → <i>The book that is on the desk is mine</i>) to create precise and detailed sentences.	English Learner Differentiation: L9S4, L21S3, L23S2 Develop Academic Language: L21S2
ELD.PII.5.7.Ex Condense clauses in an increasing variety of ways (e.g., through a growing number of types of embedded clauses and other condensing as in, <i>The book is mine. The book is about science. The book is on the desk.</i> → <i>The science book that's on the desk is mine</i>) to create precise and detailed sentences.	
ELD.PII.5.7.Br Condense clauses in a variety of ways (e.g., through various types of embedded clauses and some nominalizations as in, <i>They were a very strong army. They had a lot of enemies. They crushed their enemies because they were strong.</i> → <i>Their strength helped them crush their numerous enemies</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)
Factors and Groups	Unit 5: Lessons 30, 34
Fraction Connections	Unit 2: Lessons 12, 13 Unit 3: Lessons 18, 19, 20, 21, 22, 23
Layers of Cubes	Unit 1: Lessons 1, 2, 3
Modeling	Unit 1: Lesson 4 Unit 2: Lessons 10, 11, 14 Unit 3: Lessons 15, 16
Plotting Patterns	Unit 4: Lesson 27 Unit 5: Lessons 31, 33
Powers and Place Value	Unit 2: Lessons 6, 7, 8, 9
Seeing Division	Unit 1: Lesson 5 Unit 3: Lessons 17, 24 Unit 4: Lessons 25, 26
Shapes on a Plane	Unit 4: Lessons 28, 29 Unit 5: Lesson 32
Telling a Data Story	Unit 5: Lesson 32

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 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>
LESSON 3			
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 discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while discovering shape and space.</i>
LESSON 4			
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>
3	<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 5			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for and make use of structure . . .</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 make use of structure . . .</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>

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 construct viable arguments and critique the reasoning of others ...</i>	<i>while taking wholes apart, putting parts together.</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 taking wholes apart, putting parts together.</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 taking wholes apart, putting parts together.</i>
LESSON 9			
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 10			
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 11			
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 12			
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>

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 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 14			
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 will happen . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to predict what will happen . . .</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 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>
LESSON 16			
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 17			
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 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>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
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 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 together.</i>
LESSON 20			
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 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 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 together.</i>
LESSON 22			
1	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting 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 together.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while taking wholes apart, putting together.</i>
LESSON 24			
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 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 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 together.</i>
LESSON 25			
1	<i>In order to make sense of the world ...</i>	<i>students will look for and make use of structure ...</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 make use of structure ...</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 make use of structure ...</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 impact the future . . .</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 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 impact the future . . .</i>	<i>students will attend to precision . . .</i>	<i>while reasoning with data.</i>
LESSON 29			
1	<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>
2	<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>
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>
LESSON 30			
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 predict what will happen . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
LESSON 32			
1	<i>In order to predict what will happen . . .</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 reasoning with data.</i>
3	<i>In order to predict what will happen . . .</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 33			
1	<i>In order to predict what will happen . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to predict what will happen . . .</i>	<i>students will look for and make use of structure . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to impact the future . . .</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 predict what will happen . . .</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>



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: L16S3 Problems: L3S2, L15S3, L18S3, L27S3 Data Investigation: Unit 2

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: L32S3 Problems: L9S3, L16S3, L17S4, L20S3, L24S2, L32S2

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: L17S4 Problems: L2S2, L9S3, L26S2

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: L9S3, L25S3, L30S3 Problems: L8S4, L10S3, L22S3, L29S4, L30S4

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: L29S3 Problems: L4S4, L5S5, L10S3, L12S4, L13S2, L14S3, L25S4, L33S2