

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 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)
Ratios & Proportional Relationships	
Understand ratio concepts and use ratio reasoning to solve problems.	
6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. <i>For example, "The ratio of wings to beaks in the bird house at the zoo was 2 : 1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."</i>	Focus: 12 Applied: 13
6.RP.2 Understand the concept of a unit rate $\frac{a}{b}$ associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. <i>For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $\frac{3}{4}$ cup of flour for each cup of sugar." "We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."</i>	Focus: 15 Applied: 16
6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. - Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. - Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i> - Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30 ... 100 times the quantity); solve problems involving finding the whole, given a part and the percent. - Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	Focus: 13, 14 Focus: 16 Developing: 13 Focus: 17, 18 Focus: 16

Standard	Lesson(s)
The Number System	
Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	
6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, create a story context for $\left(\frac{2}{3}\right) \div \left(\frac{3}{4}\right)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $\left(\frac{2}{3}\right) \div \left(\frac{3}{4}\right) = \frac{8}{9}$ because $\frac{3}{4}$ of $\frac{8}{9}$ is $\frac{2}{3}$. (In general, $\left(\frac{a}{b}\right) \div \left(\frac{c}{d}\right) = \frac{ad}{bc}$.) How much chocolate will each person get if 3 people share $\frac{1}{2}$ lb of chocolate equally? How many $\frac{3}{4}$-cup servings are in $\frac{2}{3}$ of a cup of yogurt? How wide is a rectangular strip of land with length $\frac{3}{4}$ mi and area $\frac{1}{2}$ square mi?</i>	Focus: 9, 10 Applied: 11, 21
Compute fluently with multi-digit numbers and find common factors and multiples.	
6.NS.2 Fluently divide multi-digit numbers using the standard algorithm.	Focus: 8 Applied: 21, 32, 33
6.NS.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	Focus: 7, 8 Developing: 1, 2, 3 Applied: 16, 18, 21, 31, 32, 33
6.NS.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i>	Focus: 6, 19
Apply and extend previous understandings of numbers to the system of rational numbers.	
6.NS.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	Focus: 23 Applied: 24, 25, 26, 27
6.NS.6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Focus: 23 Applied: 27 Focus: 27 Developing: 28 Focus: 23, 27 Applied: 24, 26, 28

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
The Number System <i>continued</i>	
Apply and extend previous understandings of numbers to the system of rational numbers. <i>continued</i>	
6.NS.7 Understand ordering and absolute value of rational numbers. a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. <i>For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.</i> b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. <i>For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C.</i> c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. <i>For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars.</i> d. Distinguish comparisons of absolute value from statements about order. <i>For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.</i>	Focus: 24 Applied: 26 Focus: 24 Applied: 26 Focus: 25 Applied: 28 Focus: 25
6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Focus: 28
Expressions & Equations	
Apply and extend previous understandings of arithmetic to algebraic expressions.	
6.EE.1 Write and evaluate numerical expressions involving whole-number exponents.	Focus: 5 Applied: 6, 7
6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation "Subtract y from 5" as $5 - y$.</i> b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. <i>For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.</i> c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.</i>	Focus: 4 Developing: 1, 2, 3 Applied: 5 Focus: 4 Applied: 5, 19 Focus: 4, 5 Developing: 1, 2, 3 Applied: 7, 11, 20
6.EE.3 Apply the properties of operations to generate equivalent expressions. <i>For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</i>	Focus: 19 Developing: 4 Applied: 21
6.EE.4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). <i>For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number y stands for.</i>	Focus: 19 Developing: 4

Standard	Lesson(s)
Expressions & Equations <i>continued</i>	
Reason about and solve one-variable equations and inequalities.	
6.EE.5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	Focus: 20, 26 Applied: 21
6.EE.6 Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Focus: 4 Developing: 1, 2 Applied: 19, 20, 21, 22, 26
6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q , and x are all nonnegative rational numbers.	Focus: 21
6.EE.8 Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Focus: 26
Represent and analyze quantitative relationships between dependent and independent variables.	
6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation $d = 65t$ to represent the relationship between distance and time.	Focus: 22
Geometry	
Solve real-world and mathematical problems involving area, surface area, and volume.	
6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	Focus: 1, 2 Applied: 7, 8, 10, 28
6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = \ell wh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	Focus: 11 Applied: 21
6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Focus: 28 Developing: 27
6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Focus: 3 Applied: 5, 7

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Statistics & Probability	
Develop understanding of statistical variability.	
6.SP.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. <i>For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages.</i>	Focus: 29
6.SP.2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	Focus: 29, 30 Applied: 31, 33
6.SP.3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Focus: 31, 32 Applied: 33
Summarize and describe distributions.	
6.SP.4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	Focus: 30, 31 Developing: 29 Applied: 32, 33
6.SP.5 Summarize numerical data sets in relation to their context, such as by: a. Reporting the number of observations. b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Focus: 29 Applied: 30 Focus: 30 Developing: 29 Focus: 31, 32 Applied: 33 Focus: 33



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 10, 28.
2 Reason abstractly and quantitatively.	Embedded in all lessons. Targeted in Lessons 4, 7, 13, 18, 19, 21, 24, 26. STEM Stories: Tessa Lau, John McCarthy
3 Construct viable arguments and critique the reasoning of others.	Embedded in all lessons. Targeted in Lessons 3, 16, 33. STEM Stories: Lewis Latimer
4 Model with mathematics.	Embedded in all Strategy lessons. Targeted in Lesson 4.
5 Use appropriate tools strategically.	Embedded in all Strategy lessons. Targeted in Lessons 2, 5, 8, 11, 13, 18, 19, 31. STEM Stories: Diana Trujillo
6 Attend to precision.	Embedded in all Strategy lessons. Targeted in Lessons 1, 3, 4, 26, 31. STEM Stories: Isabella Alona Abbott
7 Look for and make use of structure.	Embedded in all lessons. Targeted in Lessons 2, 6, 7, 8, 10, 14, 21, 22, 30, 32. STEM Stories: Tetsuya “Ted” Fujita
8 Look for and express regularity in repeated reasoning.	Embedded in all Strategy lessons. Targeted in Lessons 5, 6, 8, 11, 16, 26, 32. STEM Stories: Sabrina Gonzalez Pasterski



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 Expressions and Equations: Area, Algebraic Expressions, and Exponents		
Lesson 1 Find the Area of a Parallelogram	Focus: 6.G.1 Developing: 6.NS.3, 6.EE.2.a, 6.EE.2.c, 6.EE.6	Embedded: 1–8 Targeted: 6
Lesson 2 Find the Area of Triangles and Other Polygons	Focus: 6.G.1 Developing: 6.NS.3, 6.EE.2.a, 6.EE.2.c, 6.EE.6	Embedded: 1–8 Targeted: 5, 7
Lesson 3 Use Nets to Find Surface Area	Focus: 6.G.4 Developing: 6.NS.3, 6.EE.2.a, 6.EE.2.c	Embedded: 1–8 Targeted: 3, 6
Lesson 4 Work with Algebraic Expressions	Focus: 6.EE.2, 6.EE.2.a, 6.EE.2.b, 6.EE.2.c, 6.EE.6 Developing: 6.EE.3, 6.EE.4	Embedded: 1–8 Targeted: 2, 6
Lesson 5 Write and Evaluate Expressions with Exponents	Focus: 6.EE.1, 6.EE.2, 6.EE.2.c Applied: 6.EE.2.a, 6.EE.2.b, 6.G.4	Embedded: 1–8 Targeted: 5, 8
Lesson 6 Find Greatest Common Factor and Least Common Multiple	Focus: 6.NS.4 Applied: 6.EE.1	Embedded: 1–8 Targeted: 7, 8
Unit 2 Decimals and Fractions: Base-Ten Operations, Division with Fractions, and Volume		
Lesson 7 Add, Subtract, and Multiply Multi-Digit Decimals	Focus: 6.NS.3 Applied: 6.EE.1, 6.EE.2.c, 6.G.1, 6.G.4	Embedded: 1–8 Targeted: 2, 7
Lesson 8 Divide Whole Numbers and Multi-Digit Decimals	Focus: 6.NS.2, 6.NS.3 Applied: 6.G.1	Embedded: 1–8 Targeted: 5, 7, 8
Lesson 9 Understand Division with Fractions	Focus: 6.NS.1	Embedded: 2, 3, 7
Lesson 10 Divide Fractions	Focus: 6.NS.1 Applied: 6.G.1	Embedded: 1–8 Targeted: 1, 7
Lesson 11 Solve Volume Problems with Fractions	Focus: 6.G.2 Applied: 6.NS.1, 6.EE.2.c	Embedded: 1–8 Targeted: 5, 8

Lesson	Standard(s)	SMP
Unit 3 Ratio Reasoning: Ratio Concepts and Equivalent Ratios		
Lesson 12 Understand Ratio Concepts	Focus: 6.RP.1	Embedded: 2, 3, 7
Lesson 13 Find Equivalent Ratios	Focus: 6.RP.3, 6.RP.3.a Developing: 6.RP.3.b Applied: 6.RP.1	Embedded: 1–8 Targeted: 2, 4, 5
Lesson 14 Use Part-to-Part and Part-to-Whole Ratios	Focus: 6.RP.3, 6.RP.3.a	Embedded: 1–8 Targeted: 7
Unit 4 Ratio Reasoning: Unit Rates and Percent		
Lesson 15 Understand Rate Concepts	Focus: 6.RP.2	Embedded: 2, 3, 7
Lesson 16 Use Unit Rates to Solve Problems	Focus: 6.RP.3, 6.RP.3.b, 6.RP.3.d Applied: 6.RP.2, 6.NS.3	Embedded: 1–8 Targeted: 3, 8
Lesson 17 Understand Percents	Focus: 6.RP.3, 6.RP.3.c	Embedded: 2, 3, 7
Lesson 18 Use Percents to Solve Problems	Focus: 6.RP.3, 6.RP.3.c Applied: 6.NS.3	Embedded: 1–8 Targeted: 2, 5
Unit 5 Algebraic Thinking: Equivalent Expressions and Equations with Variables		
Lesson 19 Write and Identify Equivalent Expressions	Focus: 6.NS.4, 6.EE.3, 6.EE.4 Applied: 6.EE.2.b, 6.EE.6	Embedded: 1–8 Targeted: 2, 5
Lesson 20 Understand Solutions of Equations	Focus: 6.EE.5 Applied: 6.EE.2.c, 6.EE.6	Embedded: 2, 3, 7
Lesson 21 Write and Solve One-Variable Equations	Focus: 6.EE.7 Applied: 6.RP.3, 6.NS.1, 6.NS.2, 6.NS.3, 6.EE.3, 6.EE.5, 6.EE.6, 6.G.2	Embedded: 1–8 Targeted: 2, 7
Lesson 22 Analyze Two-Variable Relationships	Focus: 6.EE.9 Applied: 6.RP.3, 6.EE.6	Embedded: 1–8 Targeted: 7
Unit 6 Positive and Negative Numbers: Absolute Value, Inequalities, and the Coordinate Plane		
Lesson 23 Understand Positive and Negative Numbers	Focus: 6.NS.5, 6.NS.6, 6.NS.6.a, 6.NS.6.c	Embedded: 2, 3, 7
Lesson 24 Order Positive and Negative Numbers	Focus: 6.NS.7, 6.NS.7.a, 6.NS.7.b Applied: 6.NS.5, 6.NS.6.c	Embedded: 1–8 Targeted: 2
Lesson 25 Understand Absolute Value	Focus: 6.NS.7, 6.NS.7.c Applied: 6.NS.5	Embedded: 2, 3, 7
Lesson 26 Write and Graph One-Variable Inequalities	Focus: 6.EE.5, 6.EE.8 Applied: 6.NS.5, 6.NS.6.c, 6.NS.7.a, 6.NS.7.b, 6.EE.6	Embedded: 1–8 Targeted: 1, 6, 8
Lesson 27 Understand the Four-Quadrant Coordinate Plane	Focus: 6.NS.6, 6.NS.6.b, 6.NS.6.c Developing: 6.G.3 Applied: 6.NS.5, 6.NS.6.a	Embedded: 2, 3, 7
Lesson 28 Solve Problems in the Coordinate Plane	Focus: 6.NS.8, 6.G.3 Applied: 6.NS.6.b, 6.NS.6.c, 6.NS.7.c, 6.G.1	Embedded: 1–8 Targeted: 1

Correlation by Lesson *continued*

Lesson	Standard(s)	SMP
Unit 7 Statistical Thinking: Data Distributions and Measures of Center and Variability		
Lesson 29 Understand Statistical Questions and Data Distributions	Focus: 6.SP.1, 6.SP.2, 6.SP.5, 6.SP.5.a Developing: 6.SP.4, 6.SP.5.b	Embedded: 2, 3, 7
Lesson 30 Use Dot Plots and Histograms to Describe Data Distributions	Focus: 6.SP.2, 6.SP.4, 6.SP.5, 6.SP.5.b Applied: 6.SP.5.a	Embedded: 1–8 Targeted: 6, 7
Lesson 31 Interpret Median and Interquartile Range in Box Plots	Focus: 6.SP.3, 6.SP.4, 6.SP.5, 6.SP.5.c Applied: 6.NS.3, 6.SP.2	Embedded: 1–8 Targeted: 5, 6
Lesson 32 Interpret Mean and Mean Absolute Deviation	Focus: 6.SP.3, 6.SP.5, 6.SP.5.c Applied: 6.NS.2, 6.SN.3, 6.SP.4	Embedded: 1–8 Targeted: 2
Lesson 33 Use Measures of Center and Variability to Summarize Data	Focus: 6.SP.5, 6.SP.5.d Applied: 6.NS.2, 6.NS.3, 6.SP.2, 6.SP.3, 6.SP.4, 6.SP.5.c	Embedded: 1–8 Targeted: 3



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.6.1** *Exchanging information/ideas*, **ELD.PI.6.3** *Offering opinions*, **ELD.PI.6.5** *Listening actively*, **ELD.PI.6.6** *Reading/viewing closely*, and **ELD.PI.6.11** *Supporting opinions*,

Part I: Interacting in Meaningful Ways

ELD Standard	Supported In
Exchanging information/ideas	
ELD.PI.6.1.Em Engage in conversational exchanges and express ideas on familiar topics by asking and answering <i>yes-no</i> and <i>wh-</i> questions and responding using simple phrases.	English Learner Differentiation: L2S4, L3S2, L5S3, L7S1, L8S5, L9S1, L9S3, L10S2, L10S3, L11S4, L13S2, L13S4, L14S3, L14S4, L15S1, L16S2, L16S3, L17S2, L18S2, L18S3, L19S3, L19S4, L20S1, L21S1, L21S4, L21S5, L23S3, L25S1, L26S1, L26S4, L27S2, L28S1, L28S2, L29S2, L30S1, L30S2, L30S3, L31S1, L31S2, L31S3, L31S4, L32S2, L32S3, L33S1, L33S3 Develop Academic Language: L1S2, L4S3, L6S2, L6S2, L11S1, L12S2, L12S2, L18S2, L20S2, L21S4, L23S2, L26S3, L26S3, L26S4, L32S2, L32S3
ELD.PI.6.1.Ex Contribute to class, group, and partner discussions by following turn-taking rules, asking relevant questions, affirming others, adding relevant information, and paraphrasing key ideas.	
ELD.PI.6.1.Br Contribute to class, group, and partner discussions by following turn-taking rules, asking relevant questions, affirming others, adding relevant information and evidence, paraphrasing key ideas, building on responses, and providing useful feedback.	
Interacting via written English	
ELD.PI.6.2.Em Engage in short written exchanges with peers and collaborate on simple written texts on familiar topics, using technology when appropriate.	English Learner Differentiation: L1S3, L7S1, L11S2, L31S1, L32S1
ELD.PI.6.2.Ex Engage in longer written exchanges with peers and collaborate on more detailed written texts on a variety of topics, using technology when appropriate.	
ELD.PI.6.2.Br Engage in extended written exchanges with peers and collaborate on complex written texts on a variety of topics, using technology when appropriate.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Supporting opinions and persuading others	
ELD.PI.6.3.Em Negotiate with or persuade others in conversations (e.g., to gain and hold the floor or ask for clarification) using basic learned phrases (e.g., <i>I think . . .</i> , <i>Would you please repeat that?</i>), as well as open responses.	English Learner Differentiation: L5S2, L6S2, L13S5, L15S3, L17S3, L24S3, L26S3, L28S4, L33S3 Develop Academic Language: L5S2, L6S2, L16S3, L20S2, L22S3, L26S2, L32S3
ELD.PI.6.3.Ex Negotiate with or persuade others in conversations (e.g., to provide counterarguments) using an expanded set of learned phrases (<i>I agree with X, but . . .</i>), as well as open responses.	
ELD.PI.6.3.Br Negotiate with or persuade others in conversations using appropriate register (e.g., to reflect on multiple perspectives) using a variety of learned phrases, indirect reported speech (e.g., <i>I heard you say X, and Gabriel just pointed out Y</i>), as well as open responses.	
Adapting language choices	
ELD.PI.6.4.Em Adjust language choices according to social setting (e.g., classroom, break time) and audience (e.g., peers, teacher).	English Learner Differentiation: L19S2, L23S1 Develop Academic Language: L7S3, L15S2, L16S2, L28S2, L30S2
ELD.PI.6.4.Ex Adjust language choices according to purpose (e.g., explaining, persuading, entertaining), task, and audience.	
ELD.PI.6.4.Br 4. Adapting language choices Adjust language choices according to task (e.g., facilitating a science experiment, providing peer feedback on a writing assignment), purpose, task, and audience.	
Listening actively	
ELD.PI.6.5.Em Demonstrate active listening in oral presentation activities by asking and answering basic questions, with prompting and substantial support.	English Learner Differentiation: L3S2, L4S3, L6S4, L7S4, L9S1, L11S4, L12S1, L13S2, L14S3, L16S2, L18S2, L21S4, L22S3, L26S5, L32S4 Develop Academic Language: L2S2, L13S2, L18S2
ELD.PI.6.5.Ex Demonstrate active listening in oral presentation activities by asking and answering detailed questions, with occasional prompting and moderate support.	
ELD.PI.6.5.Br Demonstrate active listening in oral presentation activities by asking and answering detailed questions, with minimal prompting and support.	
Reading/viewing closely	
ELD.PI.6.6a.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: L1S1, L1S2, L1S3, L2S1, L2S2, L2S4, L3S2, L3S4, L4S1, L4S2, L5S1, L5S2, L5S3, L6S1, L6S3, L7S3, L8S2, L9S3, L10S1, L10S2, L10S3, L11S1, L11S2, L11S3, L11S4, L12S1, L12S2, L12S3, L13S2, L13S4, L13S5, L15S3, L16S1, L16S3, L18S3, L19S3, L20S2, L20S3, L21S4, L22S4, L23S3, L24S2, L24S3, L25S2, L25S3, L26S3, L27S1, L27S3, L28S2, L28S4, L29S2, L30S1, L30S4, L32S1, L32S4, L33S1 Develop Academic Language: L8S3, L17S2, L21S2, L21S3, L22S2, L30S3
ELD.PI.6.6a.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.6.6a.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 Standard	Supported In
Reading/viewing closely <i>continued</i>	
ELD.PI.6.6b.Em Express inferences and conclusions drawn based on close reading of grade-level texts and viewing of multimedia using some frequently used verbs (e.g., <i>shows that, based on</i>).	English Learner Differentiation: L6S1, L17S1 Develop Academic Language: L13S3, L17S2, L24S2
ELD.PI.6.6b.Ex Express inferences and conclusions drawn based on close reading of grade-level texts and viewing of multimedia using a variety of verbs (e.g., <i>suggests that, leads to</i>).	
ELD.PI.6.6b.Br Express inferences and conclusions drawn based on close reading of grade-level texts and viewing of multimedia using a variety of precise academic verbs (e.g., <i>indicates that, influences</i>).	
ELD.PI.6.6c.Em Use knowledge of morphology (e.g., affixes, roots, and base words), context, reference materials, and visual cues to determine the meaning of unknown and multiple-meaning words on familiar topics.	English Learner Differentiation: L5S1, L8S1, L16S5, L20S1 Develop Academic Language: L2S3, L6S3, L8S2, L8S4, L19S4, L27S2, L29S2, L31S2
ELD.PI.6.6c.Ex Use knowledge of morphology (e.g., affixes, roots, and base words), context, reference materials, and visual cues to determine the meaning of unknown and multiple-meaning words on familiar and new topics.	
ELD.PI.6.6c.Br Use knowledge of morphology (e.g., affixes, roots, and base words), context, reference materials, and visual cues to determine the meaning, including figurative and connotative meanings, of unknown and multiple-meaning words on a variety of new topics.	
Evaluating language choices	
ELD.PI.6.7.Em Explain how well writers and speakers use language to support ideas and arguments with detailed evidence (e.g., identifying the precise vocabulary used to present evidence, or the phrasing used to signal a shift in meaning) with substantial support.	English Learner Differentiation: L13S3, L15S2, L22S2, L24S1, L30S4, L33S2 Develop Academic Language: L10S2
ELD.PI.6.7.Ex Explain how well writers and speakers use specific language to present ideas or support arguments and provide detailed evidence (e.g., showing the clarity of the phrasing used to present an argument) with moderate support.	
ELD.PI.6.7.Br Explain how well writers and speakers use specific language resources to present ideas or support arguments and provide detailed evidence (e.g., identifying the specific language used to present ideas and claims that are well supported and distinguishing them from those that are not) with light support.	
Analyzing language choices	
ELD.PI.6.8.Em Explain how phrasing or different common words with similar meaning (e.g., choosing to use the word <i>cheap</i> versus the phrase <i>a good saver</i>) produce different effects on the audience.	English Learner Differentiation: L1S1, L14S3, L24S1 Develop Academic Language: L5S3, L11S3, L14S3, L16S2, L16S4, L31S3
ELD.PI.6.8.Ex Explain how phrasing, different words with similar meaning (e.g., describing a character as <i>stingy</i> versus <i>economical</i>), or figurative language (e.g., <i>The room was like a dank cave, littered with food wrappers, soda cans, and piles of laundry</i>) produce shades of meaning and different effects on the audience.	
ELD.PI.6.8.Br Explain how phrasing, different words with similar meaning (e.g., <i>stingy, economical, frugal, thrifty</i>), or figurative language (e.g., <i>The room was depressed and gloomy. The room was like a dank cave, littered with food wrappers, soda cans, and piles of laundry</i>) produce shades of meaning, nuances, and different effects on the audience.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Presenting	
ELD.PI.6.9.Em Plan and deliver brief oral presentations on a variety of topics and content areas.	Math in Action: Every unit; use Oral Presentation Checklist.
ELD.PI.6.9.Ex Plan and deliver longer oral presentations on a variety of topics and content areas, using details and evidence to support ideas.	
ELD.PI.6.9.Br Plan and deliver longer oral presentations on a variety of topics and content areas, using reasoning and evidence to support ideas, as well as growing understanding of register.	
Writing	
ELD.PI.6.10a.Em Write short literary and informational texts (e.g., an argument for protecting the rain forests) collaboratively (e.g., with peers) and independently.	English Learner Differentiation: L2S2, L3S1, L8S4, L8S5, L9S2, L10S2, L11S1, L12S3, L13S1, L14S1, L15S2, L16S4, L17S1, L18S1, L18S4, L19S2, L20S3, L21S1, L21S3, L22S1, L22S2, L22S3, L23S3, L24S1, L24S2, L25S3, L26S1, L27S2, L28S1, L28S3, L29S3, L31S3, L32S2, L32S3
ELD.PI.6.10a.Ex Write longer literary and informational texts (e.g., an argument for protecting the rain forests) collaboratively (e.g., with peers) and independently using appropriate text organization.	
ELD.PI.6.10a.Br Write longer and more detailed literary and informational texts (e.g., an argument for protecting the rain forests) collaboratively (e.g., with peers) and independently using appropriate text organization and growing understanding of register.	
ELD.PI.6.10b.Em Write brief summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	English Learner Differentiation: L4S4, L6S3, L8S2, L17S3, L21S2, L21S3, L25S3, L27S2
ELD.PI.6.10b.Ex Write increasingly concise summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	
ELD.PI.6.10b.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).	
Justifying/arguing	
ELD.PI.6.11a.Em Justify opinions by providing some textual evidence (e.g., quoting from the text) or relevant background knowledge, with substantial support.	English Learner Differentiation: L2S3, L3S3, L5S4, L9S3, L10S4, L13S5, L17S3, L19S5, L20S1, L21S5, L22S4, L23S2, L26S2, L28S4, L31S4, L33S2, L33S3 Develop Academic Language: L3S2, L4S3, L10S3, L14S2, L19S2
ELD.PI.6.11a.Ex Justify opinions or persuade others by providing relevant textual evidence (e.g., quoting from the text or referring to what the text says) or relevant background knowledge, with moderate support.	
ELD.PI.6.11a.Br Justify opinions or persuade others by providing detailed and relevant textual evidence (e.g., quoting from the text directly or referring to specific textual evidence) or relevant background knowledge, with light support.	
ELD.PI.6.11b.Em Express attitude and opinions or temper statements with some basic modal expressions (e.g., can, has to).	English Learner Differentiation: L5S4, L7S4, L20S2, L22S4 Develop Academic Language: L14S2
ELD.PI.6.11b.Ex Express attitude and opinions or temper statements with a variety of familiar modal expressions (e.g., maybe/probably, can/could, must).	
ELD.PI.6.11b.Br Express attitude and opinions or temper statements with nuanced modal expressions (e.g., probably/certainly/definitely, should/would, might) and phrasing (e.g., In my opinion ...).	

ELD Standard	Supported In
Selecting language resources	
ELD.PI.6.12a.Em Use a select number of general academic words (e.g., <i>author, chart</i>) and domain-specific words (e.g., <i>scene, cell, fraction</i>) to create some precision while speaking and writing.	English Learner Differentiation: L1S2, L2S1, L3S1, L3S3, L4S1, L4S2, L4S3, L5S1, L6S1, L6S2, L7S1, L7S2, L7S3, L8S1, L8S3, L9S1, L10S1, L10S3, L10S4, L11S1, L11S3, L12S2, L13S3, L13S4, L14S2, L14S4, L15S1, L16S1, L16S2, L17S2, L19S1, L19S4, L19S5, L20S3, L21S1, L21S2, L21S3, L22S1, L23S2, L24S2, L25S1, L25S2, L26S1, L26S2, L26S3, L26S4, L26S5, L27S1, L27S3, L28S1, L29S1, L29S3, L30S1, L30S2, L30S3, L31S1, L31S2, L31S3, L32S1, L32S2, L33S1 Develop Academic Language: L3S3, L7S2, L8S2, L9S2, L13S4, L16S4, L18S3, L19S3, L25S2, L27S2, L28S2, L30S2, L31S2, L32S2, L33S2 Build Your Vocabulary: Every unit Support Vocabulary Development: Every lesson, Session 1 Vocabulary Cards: Every unit
ELD.PI.6.12a.Ex Use a growing set of academic words (e.g., <i>author, chart, global, affect</i>), domain-specific words (e.g., <i>scene, setting, plot, point of view, fraction, cell membrane, democracy</i>), synonyms, and antonyms to create precision and shades of meaning while speaking and writing.	
ELD.PI.6.12a.Br Use an expanded set of general academic words (e.g., <i>affect, evidence, demonstrate, reluctantly</i>), domain-specific words (e.g., <i>scene, setting, plot, point of view, fraction, cell membrane, democracy</i>), synonyms, antonyms, and figurative language to create precision and shades of meaning while speaking and writing.	
ELD.PI.6.12b.Em Use knowledge of morphology to appropriately select affixes in basic ways (e.g., <i>She likes X</i>).	English Learner Differentiation: L7S3, L9S1, L16S5, L20S1, L24S2, L26S1, L26S1, L32S3 Develop Academic Language: L2S3, L19S4, L28S3
ELD.PI.6.12b.Ex Use knowledge of morphology to appropriately select affixes in a growing number of ways to manipulate language (e.g., <i>She likes X. That's impossible</i>).	
ELD.PI.6.12b.Br Use knowledge of morphology to appropriately select affixes in a variety of ways to manipulate language (e.g., <i>changing observe → observation, reluctant → reluctantly, produce → production, and so on</i>).	

Part II: Learning About How English Works

ELD Standard	Supported In
Understanding text structure	
ELD.PII.6.1.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 arguments are organized around ideas) to comprehending texts and writing basic texts.	English Learner Differentiation: L3S4, L6S4, L16S4, L17S1, L28S3, L29S3 Develop Academic Language: L11S1
ELD.PII.6.1.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 arguments are structured logically around reasons and evidence) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.6.1.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 arguments are structured logically around reasons and evidence) to comprehending texts and writing cohesive texts.	
Understanding cohesion	
ELD.PII.6.2a.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: L14S2, L19S1 Develop Academic Language: L18S3, L21S2, L22S2
ELD.PII.6.2a.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.6.2a.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.6.2b.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: L4S3, L5S4, L7S2, L8S3, L8S4, L8S5, L9S2, L31S1 Develop Academic Language: L13S3, L26S4
ELD.PII.6.2b.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, on the other hand</i>) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.6.2b.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, moreover</i>) to comprehending texts and writing cohesive texts.	

ELD Standard	Supported In
Using verbs and verb phrases	
ELD.PII.6.3.Em Use a variety of verb types (e.g., doing, saying, being/having, thinking/feeling), tenses (e.g., present, past, future, simple, progressive) appropriate to the text type and discipline (e.g., simple past and past progressive for recounting an experience) on familiar topics.	English Learner Differentiation: L7S4, L8S4, L12S3, L14S1, L16S4, L18S1, L18S4, L20S2, L31S2 Develop Academic Language: L21S3, L24S2
ELD.PII.6.3.Ex Use various verb types (e.g., doing, saying, being/having, thinking/feeling, reporting), tenses (e.g., present, past, future, simple, progressive, perfect) appropriate to the task, text type, and discipline (e.g., simple present for literary analysis) on an increasing variety of topics.	
ELD.PII.6.3.Br Use various verb types (e.g., doing, saying, being/having, thinking/feeling, reporting), tenses (e.g., present, past, future, simple, progressive, perfect) appropriate to the task, text type, and discipline (e.g., the present perfect to describe previously made claims or conclusions) on a variety of topics.	
Using nouns and noun phrases	
ELD.PII.6.4.Em Expand noun phrases in simple ways (e.g., adding a sensory 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: L2S4, L4S4, L14S1, L15S3, L17S2, L18S1, L27S1 Develop Academic Language: L14S3, L19S3, L28S3, L31S3
ELD.PII.6.4.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.6.4.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.	
Modifying to add details	
ELD.PII.6.5.Em Expand sentences with simple adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause) about a familiar activity or process.	English Learner Differentiation: L15S2, L16S5, L29S1
ELD.PII.6.5.Ex Expand sentences with an increasing variety of adverbials (e.g., adverbs, adverb phrases, prepositional phrases) to provide details (e.g., time, manner, place, cause) about a familiar or new activity or process.	
ELD.PII.6.5.Br Expand sentences with a variety of adverbials (e.g., adverbs, adverb phrases and clauses, prepositional phrases) to provide details (e.g., time, manner, place, cause) about a variety of familiar and new activities and processes.	

Part II: Learning About How English Works *continued*

ELD Standard	Supported In
Connecting ideas	
ELD.PII.6.6.Em Combine clauses in a few basic ways to make connections between and join ideas (e.g., creating compound sentences using <i>and</i> , <i>but</i> , <i>so</i>).	English Learner Differentiation: L2S3, L9S2, L13S1, L19S5, L23S1, L23S1, L30S2 Develop Academic Language: L8S3, L10S2, L30S3
ELD.PII.6.6.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 a reason (e.g., <i>He stayed at home on Sunday to study for Monday’s exam</i>) or to make a concession (e.g., <i>She studied all night even though she wasn’t feeling well</i>).	
ELD.PII.6.6.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 a reason (e.g., <i>He stayed at home on Sunday because he had an exam on Monday</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 students worked in groups while their teacher walked around the room</i>).	
Condensing ideas	
ELD.PII.6.7.Em Condense ideas in simple ways (e.g., by compounding verbs, adding prepositional phrases, or through simple embedded clauses or other ways of condensing as in, This is a story about a girl. The girl changed the world. → This is a story about a girl <i>who changed the world</i>) to create precise and detailed sentences.	English Learner Differentiation: L28S3 Develop Academic Language: L4S2, L8S4, L23S2
ELD.PII.6.7.Ex Condense ideas in an increasing variety of ways (e.g., through various types of embedded clauses and other ways of condensing, as in, Organic vegetables are food. They’re made without chemical fertilizers. They’re made without chemical insecticides) → Organic vegetables are foods <i>that are made without chemical fertilizers or insecticides</i>) to create precise and detailed sentences.	
ELD.PII.6.7.Br Condense ideas in a variety of ways (e.g., through various types of embedded clauses, ways of condensing, and nominalization as in, They <i>destroyed</i> the rain forest. Lots of animals <i>died</i> → The <i>destruction</i> of the rain forest led to <i>the death</i> of many animals) to create precise and detailed sentences.	

California Big Ideas

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)
Distance and Direction	Unit 6: Lessons 23, 24, 25, 26, 27, 28
Fraction Relationships	Unit 2: Lessons 9, 10 Unit 4: Lessons 17, 18
Generalizing with Multiple Representations	Unit 1: Lessons 4, 5 Unit 3: Lessons 12, 13, 14 Unit 4: Lessons 15, 18 Unit 5: Lessons 19, 20, 21
Graphing Shapes	Unit 6: Lesson 28
Model the World	Unit 2: Lessons 7, 8 Unit 4: Lesson 16
Nets and Surface Area	Unit 1: Lessons 1, 2, 3 Unit 2: Lesson 11
Patterns Inside Numbers	Unit 1: Lesson 6
Relationships Between Variables	Unit 4: Lesson 16 Unit 5: Lesson 22
The Shape of Distributions	Unit 7: Lessons 30, 31, 32, 33
Variability in Data	Unit 7: Lessons 29, 30, 31

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 predict what will happen . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while taking wholes apart, putting parts together.</i>
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>
LESSON 2			
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 3			
1	<i>In order to predict what will happen . . .</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 discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
LESSON 4			
1	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while exploring changing quantities.</i>
LESSON 5			
1	<i>In order to make sense of the world . . .</i>	<i>students will 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 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>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 6			
1	<i>In order to predict what will happen . . .</i>	<i>students will look for and express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will look for and express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</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 exploring changing quantities.</i>
LESSON 7			
1	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will model with mathematics . . .</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 8			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while 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>
LESSON 10			
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 11			
1	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while discovering shape and space.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 13			
1	<i>In order to make sense of the world . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while 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 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 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 16			
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 18			
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 19			
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 model with mathematics . . .</i>	<i>while exploring changing quantities.</i>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 19 <i>continued</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 predict what will happen . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while exploring changing quantities.</i>
LESSON 21			
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>
4	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while exploring changing quantities.</i>
LESSON 22			
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 predict what will happen . . .</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 24			
1	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to predict what will happen . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while discovering shape and space.</i>
LESSON 26			
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 discovering shape and space.</i>
3	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
4	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 28			
1	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while discovering shape and space.</i>
2	<i>In order to impact the future . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while discovering shape and space.</i>
3	<i>In order to impact the future . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while discovering shape and space.</i>
LESSON 30			
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 construct viable arguments and critique the reasoning of others . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while reasoning with data.</i>
LESSON 31			
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 use appropriate tools strategically . . .</i>	<i>while reasoning with data.</i>
3	<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>
LESSON 32			
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 33			
1	<i>In order to impact the future . . .</i>	<i>students will make sense of problems and persevere in solving them . . .</i>	<i>while reasoning with data.</i>
2	<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>



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: L3S3 Problems: L8S4, L24S3, L26S5, L28S3, L32S2

Principle 2: People Influence 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 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 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 Problems: L2S2, L5S4, L10S4, L30S4, L31S4

Continued on next page ►

Citation Key L = Lesson, S = Session

California Environmental Principles and Concepts (EP&C) Correlation *continued*

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: L31S Problems: L4S4, L6S2, L16S5, L33S3

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: L7S3, L21S4 Problems: L3S3, L21S5

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: L6S3, L14S3, L18S3 Problems: L1S3, L7S2, L11S2, L13S3, L14S4, L18S4, L19S4, L22S2 Data Investigation: Unit 4