

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)
Ratios & Proportional Relationships	
Analyze proportional relationships and use them to solve real-world and mathematical problems.	
7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{\frac{1}{2}}{\frac{1}{4}}$ miles per hour, equivalently 2 miles per hour.</i>	Focus: 2 Applied: 4, 5
7.RP.2 Recognize and represent proportional relationships between quantities. - Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. - Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. - Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i> - Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.	Focus: 4 Applied: 5 Focus: 3, 4, 5 Developing: 1 Focus: 3 Applied: 4, 5, 6 Focus: 4
7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	Focus: 5, 20, 21 Applied: 23, 24, 31

Standard	Lesson(s)
The Number System	
Apply and extend previous understandings of operations with fractions.	
7.NS.1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i> b. Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. d. Apply properties of operations as strategies to add and subtract rational numbers.	Focus: 7 Applied: 8, 10 Focus: 7 Applied: 8, 10 Focus: 9 Applied: 10 Focus: 8, 10 Developing: 9 Applied: 15, 17
7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-\frac{p}{q} = \frac{(-p)}{q} = \frac{p}{(-q)}$. Interpret quotients of rational numbers by describing real-world contexts. c. Apply properties of operations as strategies to multiply and divide rational numbers. d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	Focus: 11 Applied: 12 Focus: 12 Developing: 11 Focus: 12 Applied: 14, 15, 17 Focus: 13 Applied: 30
7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.	Focus: 14 Applied: 15, 20, 21, 24, 25, 26

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Expressions & Equations	
Use properties of operations to generate equivalent expressions.	
7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Focus: 15 Applied: 16, 18, 19
7.EE.2 Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>	Focus: 16 Developing: 6, 15 Applied: 17, 20, 25, 26
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	
7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>	Focus: 13, 14 Developing: 7, 8, 9, 10, 11, 12 Applied: 18, 19, 20, 21, 24, 25, 26, 28
7.EE.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i> b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>	Focus: 18 Focus: 19 Applied: 29

Standard	Lesson(s)
Geometry	
Draw, construct, and describe geometrical figures and describe the relationships between them.	
7.G.1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Focus: 1 Applied: 2, 29
7.G.2 Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Focus: 29
7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Focus: 27
Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	
7.G.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Focus: 6 Applied: 25, 26
7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	Focus: 28
7.G.6 Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	Focus: 25, 26 Developing: 6, 15, 16
Statistics & Probability	
Use random sampling to draw inferences about a population.	
7.SP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Focus: 22 Applied: 23, 24
7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i>	Focus: 23
Draw informal comparative inferences about two populations.	
7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i>	Focus: 24
7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i>	Focus: 24

Correlation by CA CCSSM *continued*

Standard	Lesson(s)
Statistics & Probability <i>continued</i>	
Investigate chance processes and develop, use, and evaluate probability models.	
7.SP.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	Focus: 30 Applied: 31, 32, 33
7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i>	Focus: 31
7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i> b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i>	Focus: 32 Applied: 33 Focus: 31, 32
7.SP.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. c. Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i>	Focus: 33 Focus: 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 Lesson 33. STEM Stories: Noramay Cadena
2 Reason abstractly and quantitatively.	Embedded in all lessons. Targeted in Lessons 4, 8, 10, 15, 19, 20, 25, 29, 31. STEM Stories: Mary Jackson
3 Construct viable arguments and critique the reasoning of others.	Embedded in all lessons. Targeted in Lessons 12, 20, 25, 27, 28, 29, 31. STEM Stories: Frieda Zames
4 Model with mathematics.	Embedded in all Strategy lessons. Targeted in Lessons 6, 19, 20, 23, 26, 33. STEM Stories: Wanda Díaz-Merced
5 Use appropriate tools strategically.	Embedded in all Strategy lessons. Targeted in Lessons 23, 24.
6 Attend to precision.	Embedded in all Strategy lessons. Targeted in Lesson 14. STEM Stories: Daniel Hale Williams III
7 Look for and make use of structure.	Embedded in all lessons. Targeted in Lessons 1, 2, 4, 5, 6, 8, 10, 13, 15, 18, 19, 21, 24, 25, 26, 29, 32. STEM Stories: Erik Sorenson
8 Look for and express regularity in repeated reasoning.	Embedded in all Strategy lessons. Targeted in Lessons 1, 12, 13, 28, 33. STEM Stories: Larry Kwak



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 Proportional Relationships: Ratios, Rates, and Circles		
Lesson 1 Solve Problems Involving Scale	Focus: 7.G.1 Developing: 7.RP.2, 7.RP.2.b, 7.EE.4	Embedded: 1–8 Targeted: 7, 8
Lesson 2 Find Unit Rates Involving Ratios of Fractions	Focus: 7.RP.1 Applied: 7.G.1	Embedded: 1–8 Targeted: 7
Lesson 3 Understand Proportional Relationships	Focus: 7.RP.2, 7.RP.2.b, 7.RP.2.c	Embedded: 2, 3, 7
Lesson 4 Represent Proportional Relationships	Focus: 7.RP.2, 7.RP.2.a, 7.RP.2.b, 7.RP.2.d Applied: 7.RP.1, 7.RP.2.c	Embedded: 1–8 Targeted: 2, 7
Lesson 5 Solve Proportional Relationship Problems	Focus: 7.RP.2, 7.RP.2.b, 7.RP.3 Developing: 7.EE.4 Applied: 7.RP.1, 7.RP.2.a, 7.RP.2.c	Embedded: 1–8 Targeted: 7
Lesson 6 Solve Area and Circumference Problems Involving Circles	Focus: 7.G.4 Developing: 7.EE.2, 7.G.6 Applied: 7.RP.2, 7.RP.2.c	Embedded: 1–8 Targeted: 4, 7
Unit 2 Numbers and Operations: Add and Subtract Rational Numbers		
Lesson 7 Understand Addition with Negative Integers	Focus: 7.NS.1, 7.NS.1.a, 7.NS.1.b Developing: 7.EE.3	Embedded: 2, 3, 7
Lesson 8 Add with Negative Numbers	Focus: 7.NS.1, 7.NS.1.d Developing: 7.EE.3 Applied: 7.NS.1.a, 7.NS.1.b	Embedded: 1–8 Targeted: 2, 7
Lesson 9 Understand Subtraction with Negative Integers	Focus: 7.NS.1, 7.NS.1.c Developing: 7.NS.1.d, 7.EE.3	Embedded: 2, 3, 7
Lesson 10 Add and Subtract Positive and Negative Numbers	Focus: 7.NS.1, 7.NS.1.d Developing: 7.EE.3 Applied: 7.NS.1.a, 7.NS.1.b, 7.NS.1.c	Embedded: 1–8 Targeted: 2, 7

Lesson	Standard(s)	SMP
Unit 3 Numbers and Operations: Multiply and Divide Rational Numbers		
Lesson 11 Understand Multiplication with Negative Numbers	Focus: 7.NS.2, 7.NS.2.a Developing: 7.NS.2.b, 7.EE.3	Embedded: 2, 3, 7
Lesson 12 Multiply and Divide with Negative Numbers	Focus: 7.NS.2, 7.NS.2.b, 7.NS.2.c Developing: 7.EE.3 Applied: 7.NS.2.a	Embedded: 1–8 Targeted: 3, 8
Lesson 13 Express Rational Numbers as Terminating or Repeating Decimals	Focus: 7.NS.2, 7.NS.2.d, 7.EE.3	Embedded: 1–8 Targeted: 7, 8
Lesson 14 Use the Four Operations with Negative Numbers	Focus: 7.NS.3, 7.EE.3 Applied: 7.NS.1, 7.NS.2.c	Embedded: 1–8 Targeted: 6
Unit 4 Algebraic Thinking: Expressions, Equations, and Inequalities		
Lesson 15 Write Equivalent Expressions Involving Rational Numbers	Focus: 7.EE.1 Developing: 7.EE.2, 7.G.6 Applied: 7.NS.1.d, 7.NS.2.c, 7.NS.3	Embedded: 1–8 Targeted: 2, 7
Lesson 16 Understand Reasons for Rewriting Expressions	Focus: 7.EE.2 Developing: 7.EE.4, 7.G.6 Applied: 7.EE.1	Embedded: 2, 3, 7
Lesson 17 Understand Multi-Step Equations	Focus: 7.EE.4 Applied: 7.NS.1.d, 7.NS.2.c, 7.EE.2	Embedded: 2, 3, 7
Lesson 18 Write and Solve Multi-Step Equations	Focus: 7.EE.4, 7.EE.4.a Applied: 7.EE.1, 7.EE.3	Embedded: 1–8 Targeted: 7
Lesson 19 Write and Solve Inequalities	Focus: 7.EE.4, 7.EE.4.b Applied: 7.EE.1, 7.EE.3	Embedded: 1–8 Targeted: 2, 4, 7
Unit 5 Proportional Reasoning: Percent and Statistical Samples		
Lesson 20 Solve Problems Involving Percents	Focus: 7.RP.3 Applied: 7.NS.3, 7.EE.2, 7.EE.3	Embedded: 1–8 Targeted: 2, 3, 4
Lesson 21 Solve Problems Involving Percent Change and Percent Error	Focus: 7.RP.3 Applied: 7.NS.3, 7.EE.3	Embedded: 1–8 Targeted: 7
Lesson 22 Understand Random Sampling	Focus: 7.SP.1 Applied: 7.RP.2	Embedded: 2, 3, 7
Lesson 23 Reason About Random Sampling	Focus: 7.SP.2 Applied: 7.RP.3, 7.SP.1	Embedded: 1–8 Targeted: 4, 5
Lesson 24 Compare Populations	Focus: 7.SP.3, 7.SP.4 Applied: 7.RP.3, 7.NS.3, 7.EE.3, 7.SP.1	Embedded: 1–8 Targeted: 5, 7

Correlation by Lesson *continued*

Lesson	Standard(s)	SMP
Unit 6 Geometry: Solids, Triangles, and Angles		
Lesson 25 Solve Problems Involving Area and Surface Area	Focus: 7.G.6 Applied: 7.NS.3, 7.EE.2, 7.EE.3, 7.EE.4, 7.G.4	Embedded: 1–8 Targeted: 2, 3, 7
Lesson 26 Solve Problems Involving Volume	Focus: 7.G.6 Applied: 7.NS.3, 7.EE.2, 7.EE.3, 7.EE.4, 7.G.4	Embedded: 1–8 Targeted: 4, 7
Lesson 27 Describe Plane Sections of Three-Dimensional Figures	Focus: 7.G.3	Embedded: 1–8 Targeted: 3
Lesson 28 Find Unknown Angle Measures	Focus: 7.G.5 Applied: 7.EE.3, 7.EE.4	Embedded: 1–8 Targeted: 3, 8
Lesson 29 Draw Plane Figures with Given Conditions	Focus: 7.G.2 Applied: 7.EE.4.b, 7.G.1	Embedded: 1–8 Targeted: 2, 3, 7
Unit 7 Probability: Theoretical Probability, Experimental Probability, and Compound Events		
Lesson 30 Understand Probability	Focus: 7.SP.5 Applied: 7.NS.2, 7.NS.2.d	Embedded: 2, 3, 7
Lesson 31 Solve Problems Involving Experimental Probability	Focus: 7.SP.6, 7.SP.7, 7.SP.7.b Applied: 7.RP.3, 7.SP.5	Embedded: 1–8 Targeted: 2, 3
Lesson 32 Solve Problems Involving Probability Models	Focus: 7.SP.7, 7.SP.7.a, 7.SP.7.b Applied: 7.SP.5	Embedded: 1–8 Targeted: 7
Lesson 33 Solve Problems Involving Compound Events	Focus: 7.SP.8, 7.SP.8.a, 7.SP.8.b, 7.SP.8.c Applied: 7.SP.5, 7.SP.7, 7.SP.7.a	Embedded: 1–8 Targeted: 1, 4, 8



English Language Development (ELD) Standards

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.7.1** *Exchanging information/ideas*, **ELD.PI.7.3** *Offering opinions*, **ELD.PI.7.5** *Listening actively*, **ELD.PI.7.6** *Reading/viewing closely*, and **ELD.PI.7.11** *Supporting opinions*.

Part I: Interacting in Meaningful Ways

ELD Standard	Supported In
Exchanging information/ideas	
ELD.PI.7.1.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: L1S5, L2S2, L3S1, L3S3, L6S1, L6S3, L7S2, L9S1, L13S4, L15S4, L16S2, L18S1, L18S2, L19S2, L20S1, L20S3, L20S4, L21S1, L21S2, L21S3, L21S4, L22S1, L23S1, L23S2, L24S2, L25S3, L25S4, L26S2, L26S3, L26S4, L27S2, L28S2, L29S2, L29S3, L29S5, L31S1, L31S2, L31S3, L31S4, L32S4, L33S3, L33S4 Develop Academic Language: L1S4, L4S2, L6S3, L7S2, L8S3, L8S4, L17S2, L19S3, L23S3
ELD.PI.7.1.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.7.1.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.7.2.Em Engage in short written exchanges with peers and collaborate on simple written texts on familiar topics, using technology when appropriate.	English Learner Differentiation: L4S2, L16S2, L22S3, L23S4
ELD.PI.7.2.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.7.2.Br Engage in extended written exchanges with peers and collaborate on complex written texts on a variety of topics, using technology when appropriate.	
Supporting opinions and persuading others	
ELD.PI.7.3.Em Negotiate with or persuade others in conversations (e.g., to gain and hold the floor or ask for clarification) using learned phrases (e.g., <i>I think . . .</i> , <i>Would you please repeat that?</i>) and open responses.	English Learner Differentiation: L15S4, L17S3, L19S1 Develop Academic Language: L4S2, L5S2, L12S3, L16S2, L18S3, L27S2
ELD.PI.7.3.Ex Negotiate with or persuade others in conversations (e.g., to provide counterarguments) using learned phrases (<i>I agree with X, but . . .</i>), and open responses.	
ELD.PI.7.3.Br Negotiate with or persuade others in conversations using appropriate register (e.g., to acknowledge new information) using a variety of learned phrases, indirect reported speech (e.g., <i>I heard you say X, and I haven't thought about that before</i>), and open responses.	

Citation Key L = Lesson, S = Session

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Adapting language choices	
ELD.PI.7.4.Em Adjust language choices according to social setting (e.g., classroom, break time) and audience (e.g., peers, teacher).	English Learner Differentiation: L20S3, L27S2, L28S3, L31S3 Develop Academic Language: L24S2, L25S4
ELD.PI.7.4.Ex Adjust language choices according to purpose (e.g., explaining, persuading, entertaining), task, and audience.	
ELD.PI.7.4.Br 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.7.5.Em Demonstrate active listening in oral presentation activities by asking and answering basic questions, with prompting and substantial support.	English Learner Differentiation: L4S1, L7S2, L15S3, L17S2, L18S1, L26S4, L28S4, L29S3, L30S2, L33S2 Develop Academic Language: L1S4, L2S2, L13S2, L20S4, L32S2
ELD.PI.7.5.Ex Demonstrate active listening in oral presentation activities by asking and answering detailed questions, with occasional prompting and moderate support.	
ELD.PI.7.5.Br Demonstrate active listening in oral presentation activities by asking and answering detailed questions, with minimal prompting and support.	
Reading/viewing closely	
ELD.PI.7.6a.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-appropriate texts and viewing of multimedia, with substantial support.	English Learner Differentiation: L1S2, L1S3, L1S4, L2S2, L4S3, L4S4, L5S1, L5S3, L6S1, L6S2, L6S3, L8S2, L10S2, L10S4, L11S1, L11S3, L12S1, L12S2, L13S4, L14S2, L15S2, L15S3, L16S3, L17S3, L18S3, L18S4, L19S1, L19S3, L19S4, L20S1, L20S4, L20S5, L21S2, L21S3, L21S4, L22S1, L23S2, L23S3, L24S1, L24S3, L24S4, L25S1, L25S2, L25S5, L26S1, L26S2, L26S4, L27S1, L27S3, L28S1, L28S3, L29S1, L29S4, L30S3, L31S4, L32S4, L33S3, L33S4, L33S5 Develop Academic Language: L1S3, L8S2, L10S2, L11S2, L15S2, L19S4, L26S2, L29S2, L31S3
ELD.PI.7.6a.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.7.6a.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.7.6b.Em Express inferences and conclusions drawn based on close reading of grade-appropriate texts and viewing of multimedia using some frequently used verbs (e.g., <i>shows that, based on</i>).	English Learner Differentiation: L9S3 Develop Academic Language: L7S2, L20S3, L21S2, L23S2, L29S4, L31S2
ELD.PI.7.6b.Ex Express inferences and conclusions drawn based on close reading of grade-appropriate texts and viewing of multimedia using a variety of verbs (e.g., <i>suggests that, leads to</i>).	
ELD.PI.7.6b.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 Standard	Supported In
Reading/viewing closely <i>continued</i>	
ELD.PI.7.6c.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: L1S1, L2S3, L8S3, L13S1, L13S2, L14S1, L24S1, L25S1, L25S4, L28S1, L28S4, L30S1, L30S2, L31S1, L32S3, L33S1 Develop Academic Language: L29S3, L33S2
ELD.PI.7.6c.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.7.6c.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.7.7.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) when provided with substantial support.	English Learner Differentiation: L3S2, L12S3, L17S2, L19S5, L25S5
ELD.PI.7.7.Ex Explain how well writers and speakers use specific language to present ideas of support arguments and provide detailed evidence (e.g., showing the clarity of the phrasing used to present an argument) when provided with moderate support.	
ELD.PI.7.7.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) when provided with light support.	
Analyzing language choices	
ELD.PI.7.8.Em Explain how phrasing or different common words with similar meaning (e.g., choosing to use the word <i>polite</i> versus <i>good</i>) produce different effects on the audience.	English Learner Differentiation: L24S3, L25S4, L30S1, L33S2 Develop Academic Language: L6S2, L14S2, L24S3, L25S4, L30S2, L32S2, L32S3
ELD.PI.7.8.Ex Explain how phrasing, different words with similar meaning (e.g., describing a character as <i>diplomatic</i> versus <i>respectful</i>) or figurative language (e.g., <i>The wind blew through the valley like a furnace</i>) produce shades of meaning and different effects on the audience.	
ELD.PI.7.8.Br Explain how phrasing, different words with similar meaning (e.g., <i>refined-respectful-polite-diplomatic</i>), or figurative language (e.g., <i>The wind whispered through the night</i>) produce shades of meaning, nuances, and different effects on the audience.	
Presenting	
ELD.PI.7.9.Em Plan and deliver brief informative oral presentations on familiar topics.	Math in Action: Every unit; use Oral Presentation Checklist.
ELD.PI.7.9.Ex Plan and deliver longer oral presentations on a variety of topics, using details and evidence to support ideas.	
ELD.PI.7.9.Br Plan and deliver longer oral presentations on a variety of topics in a variety of disciplines, using reasoning and evidence to support ideas, as well as growing understanding of register.	

Part I: Interacting in Meaningful Ways *continued*

ELD Standard	Supported In
Writing	
ELD.PI.7.10a.Em Write short literary and informational texts (e.g., an argument for wearing school uniforms) collaboratively (e.g., with peers) and independently.	English Learner Differentiation: L1S2, L1S4, L2S1, L2S3, L3S3, L6S4, L7S1, L8S4, L10S1, L12S3, L14S3, L17S1, L18S2, L19S5, L20S2, L22S2, L24S3, L24S4, L25S3, L25S5, L26S3, L28S2, L30S3, L31S1, L32S1, L32S2
ELD.PI.7.10a.Ex Write longer literary and informational texts (e.g., an argument for wearing school uniforms) collaboratively (e.g., with peers) and independently using appropriate text organization.	
ELD.PI.7.10a.Br Write longer and more detailed literary and informational texts (e.g., an argument for wearing school uniforms) collaboratively (e.g., with peers) and independently using appropriate text organization and growing understanding of register.	
ELD.PI.7.10b.Em Write brief summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	English Learner Differentiation: L4S2, L5S2, L10S2, L13S3, L16S1, L16S3, L19S3, L24S4, L29S1, L29S4
ELD.PI.7.10b.Ex Write increasingly concise summaries of texts and experiences using complete sentences and key words (e.g., from notes or graphic organizers).	
ELD.PI.7.10b.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.7.11a.Em Justify opinions by providing some textual evidence or relevant background knowledge, with substantial support.	English Learner Differentiation: L3S2, L18S3, L20S5, L22S2, L26S2, L27S2, L27S3, L28S2, L28S3, L29S2, L29S3, L29S5, L30S3, L32S3, L33S1, L33S5 Develop Academic Language: L3S2, L9S2, L19S3, L21S3, L23S3, L25S3, L27S2, L28S3, L33S3
ELD.PI.7.11a.Ex Justify opinions or persuade others by providing relevant textual evidence or relevant background knowledge, with moderate support.	
ELD.PI.7.11a.Br Justify opinions or persuade others by providing detailed and relevant textual evidence or relevant background knowledge, with light support.	
ELD.PI.7.11b.Em Express attitude and opinions or temper statements with familiar modal expressions (e.g., <i>can, may</i>).	English Learner Differentiation: L22S3, L23S1 Develop Academic Language: L9S3, L10S3
ELD.PI.7.11b.Ex Express attitude and opinions or temper statements with a variety of familiar modal expressions (e.g., <i>possibly/likely, could/ would/should</i>).	
ELD.PI.7.11b.Br Express attitude and opinions or temper statements with nuanced modal expressions (e.g., <i>possibly/potentially/absolutely, should/might</i>).	

ELD Standard	Supported In
Selecting language resources	
ELD.PI.7.12a.Em Use a select number of general academic words (e.g., <i>cycle, alternative</i>) and domain-specific words (e.g., <i>scene, chapter, paragraph, cell</i>) to create some precision while speaking and writing.	English Learner Differentiation: L1S1, L1S5, L2S1, L3S1, L3S3, L4S1, L4S3, L4S4, L6S3, L6S4, L7S3, L8S1, L9S2, L11S1, L11S2, L12S1, L12S4, L14S1, L15S1, L17S1, L17S2, L19S2, L20S1, L20S2, L20S5, L21S1, L21S4, L22S1, L22S3, L23S1, L23S2, L23S4, L24S1, L24S2, L25S1, L26S1, L26S3, L27S1, L28S1, L28S4, L29S1, L31S2 Develop Academic Language: L1S2, L4S3, L12S2, L13S3, L15S3, L18S2, L19S2, L20S2, L21S2, L22S2, L24S2, L24S3, L25S2, L26S3, L28S2, L29S2, L32S3, L33S4 Build Your Vocabulary: Every unit Support Vocabulary Development: Every lesson, Session 1 Vocabulary Cards: Every unit
ELD.PI.7.12a.Ex Use a growing set of academic words (e.g., <i>cycle, alternative, indicate, process</i>), domain-specific words (e.g., <i>scene, soliloquy, sonnet, friction, monarchy, fraction</i>), synonyms, and antonyms to create precision and shades of meaning while speaking and writing.	
ELD.PI.7.12a.Br Use an expanded set of general academic words (e.g., <i>cycle, alternative, indicate, process, emphasize, illustrate</i>), domain-specific words (e.g., <i>scene, soliloquy, sonnet, friction, monarchy, fraction</i>), synonyms, antonyms, and figurative language to create precision and shades of meaning while speaking and writing.	
ELD.PI.7.12b.Em Use knowledge of morphology to appropriately select affixes in basic ways (e.g., She likes X. He <i>walked</i> to school).	English Learner Differentiation: L10S1, L10S3, L14S1 Develop Academic Language: L12S2, L30S2
ELD.PI.7.12b.Ex Use knowledge of morphology to appropriately select affixes in a growing number of ways to manipulate language (e.g., She likes <i>walking</i> to school. That's <i>impossible</i>).	
ELD.PI.7.12b.Br Use knowledge of morphology to appropriately select affixes in a variety of ways to manipulate language (e.g., changing <i>destroy</i> à <i>destruction</i> , <i>probably</i> à <i>probability</i> , <i>reluctant</i> à <i>reluctantly</i>).	

Part II: Learning About How English Works

ELD Standard	Supported In
Understanding text structure	
ELD.PII.7.1.Em Apply understanding of how different text types are organized to express ideas (e.g., how narratives are organized sequentially) to comprehending texts and to writing brief arguments, informative/explanatory texts and narratives.	English Learner Differentiation: L5S2, L14S3, L16S1, L20S2
ELD.PII.7.1.Ex Apply understanding of the organizational features of different text types (e.g., how narratives are organized by an event sequence that unfolds naturally versus how arguments are organized around reasons and evidence) to comprehending texts and to writing increasingly clear and coherent arguments, informative/explanatory texts and narratives.	
ELD.PII.7.1.Br Apply understanding of the organizational structure of different text types (e.g., how narratives are organized by an event sequence that unfolds naturally versus how arguments are organized around reasons and evidence) to comprehending texts and to writing clear and cohesive arguments, informative/explanatory texts and narratives.	

Citation Key L = Lesson, S = Session

Part II: Learning About How English Works *continued*

ELD Standard	Supported In
Understanding cohesion	
ELD.PII.7.2a.Em Apply knowledge of familiar language resources for referring to make texts more cohesive (e.g., how pronouns refer back to nouns in text) to comprehending texts and writing brief texts.	English Learner Differentiation: L5S3, L15S3, L20S3, L23S3 Develop Academic Language: L19S4
ELD.PII.7.2a.Ex Apply knowledge of familiar language resources for referring to make texts more cohesive (e.g., how pronouns refer back to nouns in text, how using synonyms helps avoid repetition) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.7.2a.Br Apply knowledge of familiar language resources for referring to make texts more cohesive (e.g., how pronouns, synonyms, or nominalizations are used to refer backward in a text) to comprehending texts and writing cohesive texts.	
ELD.PII.7.2b.Em Apply basic understanding of how ideas, events, or reasons are linked throughout a text using everyday connecting words or phrases (e.g., <i>at the end, next</i>) to comprehending texts and writing brief texts.	English Learner Differentiation: L1S2, L5S1, L20S4, L25S2 Develop Academic Language: L1S3
ELD.PII.7.2b.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, as a result, on the other hand</i>) to comprehending texts and writing texts with increasing cohesion.	
ELD.PII.7.2b.Br Apply increasing understanding of how ideas, events, or reasons are linked throughout a text using an increasing variety of academic connecting and transitional words or phrases (e.g., <i>for instance, in addition, consequently</i>) to comprehending texts and writing texts with increasing cohesion.	
Using verbs and verb phrases	
ELD.PII.7.3.Em Use a variety of verbs in different 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: L8S2, L11S2, L13S1, L14S2, L23S3, L25S2, L32S2 Develop Academic Language: L18S2
ELD.PII.7.3.Ex Use a variety of verbs in different 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.7.3.Br Use a variety of verbs in different 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.7.4.Em Expand noun phrases in basic ways (e.g., adding a sensory adjective to a noun) in order to enrich the meaning of sentences and add details about ideas, people, and things.	English Learner Differentiation: L2S3, L17S1, L19S3, L21S2, L25S3, L32S1 Develop Academic Language: L1S2, L6S2, L8S2, L10S2, L25S2, L28S2
ELD.PII.7.4.Ex Expand noun phrases in a growing number of ways (e.g., adding adjectives to nouns or simple clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, and things.	
ELD.PII.7.4.Br Expand noun phrases in an increasing variety of ways (e.g., more complex clause embedding) in order to enrich the meaning of sentences and add details about ideas, people, and things.	

ELD Standard	Supported In
Modifying to add details	
ELD.PII.7.5.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: L7S1, L13S2, L16S2, L18S1, L22S2 Develop Academic Language: L19S2, L31S3
ELD.PII.7.5.Ex Expand sentences with 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.7.5.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.	
Connecting ideas	
ELD.PII.7.6.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> ; creating complex sentences using <i>because</i>).	English Learner Differentiation: L9S3, L27S3 Develop Academic Language: L26S3, L28S3
ELD.PII.7.6.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 in order 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.7.6.Br Combine clauses in a wide variety of ways (e.g., creating compound, complex, and compound-complex sentences) to make connections between and join ideas, for example, to show the relationship between multiple events or ideas (e.g., <i>After eating lunch, the students worked in groups while their teacher walked around the room</i>) or to evaluate an argument (e.g., <i>The author claims X, although there is a lack of evidence to support this claim</i>).	
Condensing ideas	
ELD.PII.7.7.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: L1S3, L11S3, L15S2 Develop Academic Language: L15S2, L26S2
ELD.PII.7.7.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 that are made without chemical fertilizers or insecticides) to create precise and detailed sentences.	
ELD.PII.7.7.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 rainforest led to <i>the death</i> of many animals) 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)
2-D and 3-D Connections	Unit 6: Lesson 27
Angle Relationships	Unit 6: Lesson 28
Graphing Relationships	Unit 1: Lesson 4
Populations and Samples	Unit 5: Lessons 22, 23
Probability Models	Unit 7: Lessons 30, 31, 32, 33
Proportional Relationships	Unit 1: Lessons 3, 5, 6 Unit 5: Lessons 20, 21
Scale Drawings	Unit 1: Lesson 1
Shapes in the World	Unit 6: Lessons 25, 26, 29
Unit Rates in the World	Unit 1: Lesson 2 Unit 2: Lessons 7, 8, 9, 10 Unit 3: Lessons 11, 12, 13, 14 Unit 4: Lessons 15, 16, 17, 18, 19
Visualize Populations	Unit 5: Lesson 24

Try It Inventory

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

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 1			
1	<i>In order to make sense of the world ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while 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 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>
4	<i>In order to impact the future ...</i>	<i>students will reason abstractly and quantitatively ...</i>	<i>while exploring changing quantities.</i>
LESSON 2			
1	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
LESSON 4			
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 predict what will happen ...</i>	<i>students will look for and make use of structure ...</i>	<i>while exploring changing quantities.</i>
LESSON 5			
1	<i>In order to make sense of the world ...</i>	<i>students will construct viable arguments and critique the reasoning of others ...</i>	<i>while exploring changing quantities.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will model with mathematics ...</i>	<i>while exploring changing quantities.</i>
LESSON 6			
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 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 attend to precision ...</i>	<i>while exploring changing quantities.</i>

Try It Inventory *continued*

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 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 10			
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 12			
1	<i>In order to make sense of the world . . .</i>	<i>students will look for an 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 an 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 an express regularity in repeated reasoning . . .</i>	<i>while exploring changing quantities.</i>
LESSON 13			
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 construct viable arguments and critique the reasoning of others . . .</i>	<i>while exploring changing quantities.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will construct viable arguments and critique the reasoning of others . . .</i>	<i>while exploring changing quantities.</i>
LESSON 14			
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>

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 15			
1	<i>In order to make sense of the world ...</i>	<i>students will 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 18			
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 19			
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 predict what will happen ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
3	<i>In order to predict what will happen ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while exploring changing quantities.</i>
4	<i>In order to 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 20			
1	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while 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 21			
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>

Try It Inventory *continued*

Session	Driver of Investigation	Standard for Mathematical Practice (SMP)	Content Connection
LESSON 23			
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 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 reasoning with data.</i>
LESSON 24			
1	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will attend to precision ...</i>	<i>while reasoning with data.</i>
LESSON 25			
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 26			
1	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
2	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
3	<i>In order to make sense of the world ...</i>	<i>students will make sense of problems and persevere in solving them ...</i>	<i>while taking wholes apart, putting parts together.</i>
LESSON 27			
1	<i>In order to predict what will happen ...</i>	<i>students will look for and make use of structure ...</i>	<i>while discovering shape and space.</i>
2	<i>In order to impact the future ...</i>	<i>students will look for and make use of structure ...</i>	<i>while taking wholes apart, putting parts together.</i>

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 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 29			
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 construct viable arguments and critique the reasoning of others . . .</i>	<i>while discovering shape and space.</i>
3	<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>
4	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while discovering shape and space.</i>
LESSON 31			
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 make sense of the world . . .</i>	<i>students will attend to precision . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to predict what will happen . . .</i>	<i>students will attend to precision . . .</i>	<i>while reasoning with data.</i>
LESSON 32			
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 reasoning with data.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will reason abstractly and quantitatively . . .</i>	<i>while reasoning with data.</i>
LESSON 33			
1	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while reasoning with data.</i>
2	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while reasoning with data.</i>
3	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</i>	<i>while reasoning with data.</i>
4	<i>In order to make sense of the world . . .</i>	<i>students will use appropriate tools strategically . . .</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: L20S4, L32S3 Problems: L2S2, L4S4, L14S2, L20S3, L23S4, L29S2

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 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: L8S3 Problems: L1S2, L5S3, L12S4, L18S2, L26S2, L28S4, L31S4, 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: L26S3 Problems: L10S2, L33S4

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: L6S3 Problems: L8S3, L27S2

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: L4S3, L15S3 Problems: L6S4, L13S3, L19S5, L21S2, L24S4, L25S5 Data Investigation: Unit 6