

Classroom Mathematics

California

Program Overview



GRADES

2-5

Hear What Authors and Advisors of *Classroom Mathematics California* Have to Say



“Students connect with mathematics on a deeper level when they explore its applications in real-world contexts, discovering its relevance and power in everyday life.”

—Gladis Kersaint



“Because routines are meant to be repeated, they are effective vehicles for developing new habits. Thus, teachers can lean into instructional routines to more easily develop new teaching practices in alignment with the California framework.”

—Grace Kelemanik



“Universal Design for Learning support in *Classroom Mathematics California* serves as a process that can be used to design mathematics learning environments that are both accessible and challenging for all learners.”

—Cathery Yeh



“Teachers make hundreds of decisions per hour in the classroom, often related to the flow and logistics of a lesson. Instructional routines hold the flow of the lesson steady and shift the focus of teachers’ decision making so that they can be responsive to students’ thinking in the moment and provide access and support to each and every student.”

—Amy Lucenta



“This program was designed with explicit, intentional supports that make content more accessible and meaningful for culturally and linguistically diverse learners. We want learners to see themselves in the curriculum, helping them strengthen their mathematical identities.”

—Mark Ellis

Bringing the California Framework to Life

Designed to support the implementation of the California framework, *Classroom Mathematics California* empowers educators with comprehensive resources and innovative strategies that bring the framework’s core principles to life, ensuring students not only grasp mathematics concepts but also develop genuine excitement to learn mathematics.



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Connect Mathematical Concepts across Lessons and Units

The instructional design in *Classroom Mathematics California* aligns with the California framework’s emphasis on mathematical ideas as connected and interrelated, rather than as a series of discrete topics.



The Multiple-Day Lesson Structure

The multiple-day lesson structure provides time for California students to develop deep understanding and make connections that extend across the lessons in a unit to build Big Ideas.

~30 lessons in the year with dedicated time for Big Idea connections!

Big Ideas Develop across the Multiple-Day Lesson Structure

Day 1	Day 2	Day 3	Day 4	Day 5
Explore Session	Develop Sessions <i>One to Three Develop Sessions in Each Lesson</i>			Refine Session
- Prioritize critical prerequisite skills - Accelerate access to grade-level content	- Address the rigor of the California standards - Build conceptual understanding through multiple-day Develop sessions - Practice new skills and apply new learning			- Strengthen grade-level practice and differentiation with built-in practice time - Reflect and connect with Big Ideas

A Powerful Instructional Framework

The Try–Discuss–Connect instructional framework of *Classroom Mathematics California* seamlessly incorporates multiple routines and best practices into instruction while integrating language and mathematics to develop deeper understanding.



TRY IT

Students make sense of the problem.

Students solve and support their thinking.



DISCUSS IT

Students share their thinking with a partner.

Students compare their strategies.



CONNECT IT

Students make connections and reflect on what they have learned.

Students apply their thinking to a new problem.

Building Big Ideas

Each unit helps students organize new skills and concepts into overarching mathematical ideas.

Establish learning goals by introducing **Big Ideas** at the start of a unit.

Key Understandings bridge the Big Idea to the mathematics of the unit.

California Big Ideas

Unit 2 Big Ideas and *Key Understandings*:

- **Square Tiles** Arrays of square tiles or other objects can model multiplication. (Lessons 6–7)
- **Number Flexibility to 100 for All Four Operations** Flexibility with numbers and operations supports strategies for multiplying and dividing. (Lessons 4–13)

Use the **Big Ideas Organizer** pages with students.

UNIT 2 Multiplication and Division

Unit Overview

This unit introduces students to multiplication and division. Students preview the skills they will be learning in this unit and assess what they know and do not know about them. Students record their progress after completing each lesson and reflect on their learning at the end of the unit.

California Big Ideas

Unit 2 Big Ideas and *Key Understandings*:

- **Square Tiles** Arrays of square tiles or other objects can model multiplication. (Lessons 6–7)
 - **Number Flexibility to 100 for All Four Operations** Flexibility with numbers and operations supports strategies for multiplying and dividing. (Lessons 4–13)
- Use the **Big Ideas Organizer** pages with students.

Support Positive Learning Habits

At the beginning of the unit, share the individual and social responsibility goal **Persevere**. At the end of the unit, support growth mindset by having students discuss the prompts and review the skills on the **Self Reflection** page.

Academic Language Focus

The last Unit Skill describes the academic language focus for the unit.

Use the **Academic Language Focus Resources** to model, practice, and formatively assess students' progress at the end of lessons where the focus language skill is listed.

SELF CHECK

- Give students independent time to read the skills and check the ones they think they already have.
- Tell students that all of the skills may be new, and they will be able to check off more skills over time.

UNIT 2
Multiplication and Division
Concepts, Relationships, and Patterns

SELF CHECK
Before starting this unit, check off the skills you know below. As you complete each lesson, see how many more skills you can check off!

I can ...	Before	After
Explain multiplication using equal groups and arrays.	☐	☐
Break apart numbers to make multiplying easier, for example: $3 \times 8 = 3 \times 4 + 3 \times 4$.	☐	☐
Use order and grouping to make multiplying easier, for example: $2 \times 6 \times 5 = 6 \times (2 \times 5)$.	☐	☐
Use place value to multiply, for example: $3 \times 40 = 3 \times 4 \times 10$.	☐	☐
Explain division using equal groups and arrays.	☐	☐
Understand how multiplication and division are related.	☐	☐
Use multiplication and division facts up through the facts for 10.	☐	☐
Find the rule for a pattern and explain it.	☐	☐
Explain problem-solving strategies by telling what you did in each step and why you decided to do it.	☐	☐

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Unit Skills	Lesson
Explain multiplication using equal groups and arrays.	4, 5, 6, 7
Break apart numbers to make multiplying easier, for example: $3 \times 8 = (3 \times 4) + (3 \times 4)$.	6, 7
Use order and grouping to make multiplying easier, for example: $2 \times 6 \times 5 = 6 \times (2 \times 5)$.	8
Use place value to multiply, for example: $3 \times 40 = 3 \times 4 \times 10$.	9
Explain division using equal groups and arrays.	10
Understand how multiplication and division are related.	11
Use multiplication and division facts up through the facts for 10.	12
Find the rule for a pattern and explain it.	13
Explain problem-solving strategies by telling what you did in each step and why you decided to do it.	5, 9, 12

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UNIT 2 Multiplication and Division

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UNIT 2 Big Ideas Organizer

At the end of lessons, use drawings, words, and numbers to show your thinking.

Squares Tiles

Key Understanding Arrays of square tiles or other objects can model multiplication.

Lesson 6

Lesson 7

Number Flexibility to 100 for All Four Operations

Key Understanding Flexibility with numbers and operations supports strategies for multiplying and dividing.

Lesson 5

Lesson 6

Lesson 7

Lesson 8

Lesson 9

Lesson 12

The **Big Ideas Organizer** is used at the end of the lesson as teachers facilitate discussion that encourages students to find examples of Big Ideas and Key Understandings in the lesson.

Students use the organizer to record their new understandings.

Big Idea Reflections and Connections

UNIT 2

Self Reflection

Support Positive Learning Habits

Growth Mindset

As students review and reflect, encourage them to revisit the work they did in each lesson in order to reflect on their learning, celebrate their growth, and set new goals.

- Have students revisit the skills on the **Self Reflection** page, review the Key Understandings on the **Big Ideas Organizer**, and respond to the Self Reflection prompts.
- Remind students that the list of skills on the Self Reflection page is the same list they saw on the **Self Check** page at the beginning of the unit.
- Discuss students' responses to the Self Reflection prompts as a class.
- Reinforce a growth mindset by telling students that they will continue to refine their understanding and build on these skills and concepts in future lessons and grade levels.

Individual and Social Responsibility

ASK We have been talking about making choices that help you learn math. What is going well for you as a math learner?

LISTEN FOR Students may describe managing their own learning by asking questions when they are confused and persisting with challenging work.

ASK What is going well for you when you work with other students to learn math?

LISTEN FOR Students may describe working well with others by taking turns, listening carefully, and helping each other.

UNIT 2

Self Reflection

In this unit you learned to ...

Skill	Lesson
Explain multiplication using equal groups and arrays.	4, 5, 6, 7
Break apart numbers to make multiplying easier, for example: $3 \times 8 = (3 \times 4) + (3 \times 4)$.	6, 7
Use order and grouping to make multiplying easier, for example: $2 \times 8 \times 5 = 8 \times (2 \times 5)$.	8
Use place value to multiply, for example: $3 \times 40 = 3 \times 4 \times 10$.	9
Explain division using equal groups and arrays.	10
Understand how multiplication and division are related.	11
Use multiplication and division facts up through the facts for 10.	12
Find the rule for a pattern and explain it.	13
Explain problem-solving strategies by telling what you did in each step and why you decided to do it.	5, 9, 12

Think about what you learned.

Use words, numbers, and drawings.

- I am proud that I can ...
- I worked hardest to learn how to ...
- A question I still have is ...

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At the end of the unit, students revisit the Big Idea to reinforce and extend their understanding during the **Big Ideas Reflection**.

Big Idea Reflections

MAKE CONNECTIONS

Thinking about Big Ideas helps students organize their knowledge and connect mathematical understandings.

- Have students return to the **Big Ideas Organizer** to review what they recorded. Revisit class anchor charts.
- Ask questions that support looking at one Big Idea across lessons. For example, ask: *How did you use Number Flexibility to 100 for All Four Operations to help you understand Lessons 5–9 and Lesson 12?*
- Ask questions that support making connections among Big Ideas. For example, ask: *How did working with Square Tiles help you increase your Number Flexibility to 100 for All Four Operations?*

Big Ideas Connections

Big Idea & Key Understanding	Lesson	End of Lesson Connection
Number Flexibility to 100 for All Four Operations Flexibility with numbers and operations supports strategies for multiplying and dividing.	5	You can think about multiplication as equal groups, skip counting, or repeated addition. Knowing different ways to multiply means you can use the way that makes sense to you for a problem.
	6	Breaking a multiplication problem apart lets you use multiplication facts you know to find a product. Finding different ways to break the problem apart helps you be flexible.
	7	Breaking a multiplication problem apart in different ways helps you see different multiplication facts you can use.
	8	Thinking flexibly about how numbers can be grouped and ordered can help make finding products easier. It can also help you recognize when different problems have the same answer.
	9	You can think of a multiple of multiply the two one-digit numbers.
	12	Division is the opposite of multiplication to solve division problems.

Big Idea

Number Flexibility to 100 for All Four Operations

Flexibility with numbers and operations supports strategies for multiplying and dividing.

- LOOK BACK** Find a time you changed the order or grouping of factors when solving a multiplication problem.
- SHARE AND DISCUSS** How can changing the order or grouping of factors help you multiply?

The **Big Ideas Connections** table in the Teacher's Guide offers examples of the ways Big Ideas can be applied.

Presentation slides provide tailored prompts to focus student discussions as they make connections between the Key Understanding and their work in the lesson.

The Multiple-Day Lesson Structure in Action: Explore Session

1 Day

Explore
Session

1–3 Days
Develop
Sessions

1 Day
Refine
Session

Each lesson begins by activating students' prior knowledge to build on new ideas and concepts and accelerate access to grade-level content.

Grade-Level Planning (Prerequisites) Report

Use the Grade-Level Planning (Prerequisites) report as you start the lesson to identify what students know, inform instruction and groupings, and find curated resources.



LESSON 6

SESSION 1 ● ○ ○ ○ ○

Explore Multiplying with 3, 4, and 6

In previous lessons, you learned multiplication facts for several numbers. This lesson will show you a strategy where you can use the facts you know to learn the facts for 3, 4, and 6. Use what you know to try to solve the problem below.

A restaurant serves 3 pupusas with a meal. Melosa's family orders 6 meals. How many pupusas does Melosa's family have in all?

TRY IT

Math Toolkit

- counters and cups
- 1-centimeter grid paper
- multiplication models
- number lines

DISCUSS IT

Ask your partner: How did you get started?

Ask your partner: A model I used was . . . It helped me . . .

Learning Targets SMP 1, SMP 2, SMP 3, SMP 4, SMP 5, SMP 6, SMP 7, SMP 8

- Multiply with 3, 4, and 6.
- Break apart a factor or an array to help multiply.
- Change the order of factors to help multiply.

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Lesson 6 Multiply with 3, 4, and 6 135

Activate and Access Prior Knowledge with the Try It Activity

Students are introduced to lesson concepts with a **Try It** problem they can solve using previously learned models and strategies that are relevant to the new content of the lesson.



CONNECT IT**1 LOOK BACK**

Explain how you found how many pupusas there are in all.

2 LOOK AHEAD

The array shows the multiplication problem from the previous page, 6×3 .

To solve a multiplication problem you do not know, you can break apart the problem into simpler facts you might know.

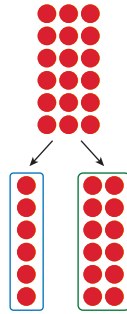
- a. Look at the way the array has been broken apart. Write the multiplication fact for each smaller array.

Left array:

Right array:

Add the products to find the total.

- b. Compare your answer to Part a with the answer you wrote in problem 1. What do you notice?

**3 REFLECT**

Why does the number of items in an array not change when you break it apart into two smaller arrays?

.....

.....

Build a Bridge to New Lesson Content**Look Back/Look Ahead**

prompts prepare students for the new content they will learn in the rest of the lesson.

Name: _____

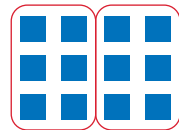
LESSON 6 SESSION 1

Prepare for Multiplying with 3, 4, and 6

- 1 Think about what you know about multiplication. Fill in each box. Use words, numbers, and pictures. Show as many ideas as you can.

My Definition	My Illustrations
Examples	Non-Examples

- 2 Ramona makes an array to find 3×4 . She decides to break apart the array as shown. Explain how her diagram can help her find 3×4 .

**Vocabulary Development**

Students use a graphic organizer to review a previously learned term that plays a key role in the upcoming lesson. This helps students reflect on concepts they know and will build upon throughout the lesson.

The Multiple-Day Lesson Structure in Action: Develop Sessions

1 Day
Explore
Session

1–3 Days

Develop
Sessions

1 Day
Refine
Session

Each lesson includes one to three Develop sessions devoted to helping students develop new strategies and understandings.

LESSON 6
Develop Multiplying with 6

SESSION 4 ● ● ● ● ●

Read and try to solve the problem below.

Felipe has 4 vases of flowers. There are 6 flowers in each vase. How many flowers does Felipe have in all?

TRY IT

Math Toolkit

- counters
- cups
- 1-centimeter grid paper
- multiplication models
- number lines

TRY IT

SMP 1, 2, 4, 5, 6

Make Sense of the Problem

Before students work on Try It, use **Say It Another Way** to help them make sense of the problem. Allow time for students to think by themselves before starting the discussion.

©Curriculum Associates, LLC. Copying is not permitted. Lesson 6: Multiply with 3, 4, and 6 151

Try It: Make Sense of the Problem and Solve and Support Your Thinking

- Students tap into **existing knowledge** to persevere in solving the problem.
- Students decide which materials to use, giving them **agency** over their learning.
- Teachers **anticipate solutions and monitor** as students explore strategies.
- Dedicated **productive struggle** time to ensure all students have the opportunity to engage with rigorous tasks
- **Engage** students by centering their prior experience.

Notice and Wonder

Why: Notice and Wonder encourages students to view and think about things through a mathematical lens. Because no response is incorrect, this routine allows students to make sense of a problem/image with very little pressure.

How: Present a problem or a problem display, such as geometric figures, a data display, expressions, or equations

ask:

ent. Then present the
ad a discussion about
iced and wondered

Language Routines Help Students Learn Academic Language

- Choose from four different Language Routines to help students make sense of the problem.
- Routines are flexible and can be switched out as desired.

Say It Another Way

Why: This routine helps students paraphrase a word problem or text so they know if they have understood it. It provides an opportunity to self-correct or to ask for clarification and ensures that the class hears the problem or story more than once and in more than one way.

How: Students read or listen to a word problem read aloud.

- Have one student paraphrase the text. Students who are listening show thumbs up/down to indicate whether the paraphrase is complete and accurate.
- Invite students who show thumbs down to explain what is inaccurate or missing in the paraphrase they heard. The original speaker then revises their paraphrase.

DISCUSS IT *continued*

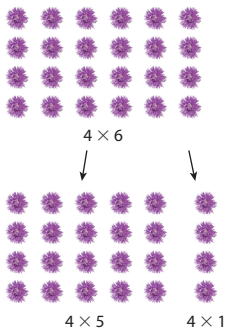
Explore different ways to understand multiplying with 6.

Felipe has 4 vases of flowers. There are 6 flowers in each vase. How many flowers does Felipe have in all?

MODEL IT

You can use an array to understand the problem.

Make an array and then break it apart into two smaller arrays.



PICTURE IT

You can also use equal groups to understand the problem.

Break apart the number of groups to find the answer.



Discuss It: Share Your Thinking with a Partner

- Students share their thinking with a partner to compare strategies.
- **Peer-to-peer discourse** occurs as the teacher circulates to elicit student thinking, **anticipate** strategies, and **select and sequence** student solutions.
- Continued student processing time to increase student ownership

DISCUSS IT

SMP 3, 6, 7, 8

Support Partner Discussion

Encourage students to use the term *array* as they discuss their solutions.

Support as needed with questions such as:

- How did you organize the information given in the problem?
- Why did you choose that model?

Common Misconception Look for students who break apart an array correctly but choose to use multiplication facts that they still have trouble with, such as 4×3 . Instead, have them use easier or better-known facts, such as 4×1 and 4×5 .

Select and Sequence Student Strategies

One possible order for whole class discussion:

- breaking apart the 6 using pictures or arrays
- breaking apart the 6 using only symbols
- breaking apart the 4 using pictures or arrays
- breaking apart the 4 using only symbols

DISCUSS IT

Ask your partner: Do you agree with me? Why or why not?

Tell your partner: At first, I thought . . .

Discuss It: As a Whole Class

- Students engage in whole class discussions, **comparing and connecting** models and strategies.
- Teachers use the **Ask/Listen Fors** to guide discussion.
- Additional models in the Teacher's Guide with Model It and Picture It

Facilitate Whole Class Discussion

Call on students to share selected strategies. Remind students that good listeners use engaged body language, such as looking at the speaker and nodding to show understanding.

Guide students to **Compare and Connect** the representations. Ask students to reword statements using array when appropriate.

ASK How is the number of vases represented in each model? How is the number of flowers in one vase represented? How were the groups of flowers broken apart?

LISTEN FOR Models represent 4 vases of 6 flowers by 4 rows or groups of 6. Multiplication equations show 4 and 6 as factors. Group models might show the 4 vases broken into 2 groups of 2 vases or 1 vase and 3 vases. Arrays might be broken into two parts horizontally or vertically.

The Multiple-Day Lesson Structure in Action: Develop Sessions, Cont'd.

1 Day
Explore
Session

1–3 Days

Develop
Sessions

1 Day
Refine
Session

SESSION 4 ● ● ● ● ● ○

CONNECT IT

Use this page to deepen your understanding of multiplying with 6.

- TALK ABOUT IT**
 - Look at **Model It** and **Picture It**. How are the strategies the same? How are they different?
 - Why do you get the same answer with both strategies?
- SHOW WHAT YOU KNOW**

Explain why you can break apart the first or the same product.
- REFLECT**

Think about all the models and strategies you tried. Which one of them helped you better understand how to multiply with 6?

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CONNECT IT

SMP 2, 3, 4, 5

- Prior to beginning Connect It, ensure all students understand the answer to the Try It is 24 flowers.
- Use some or all of problem 1 to continue the discussion. Students may use the space provided for notes.
- For problems 2 and 3, have students record their responses. Discuss as time allows.

Facilitate Whole Class Discussion

1 Talk About It

Tell students that these discussion prompts will prepare them to respond to problem 2.

ASK How does the Model It equation differ from the Picture It equation? Are there any other ways the equation could be rewritten?

LISTEN FOR Each equation breaks apart a different factor. You could also break apart each factor in other ways. 6 could be broken into 2 and 4 or 3 and 3, and 4 could be broken into 1 and 3.

2 Show What You Know

Look for the understanding that you can break apart a factor but it is not necessary. It is a matter of personal choice.

3 Reflect

Have all students focus on the strategies used to solve the Try It. If time allows, have students discuss their ideas with a partner.

Connect It: Make Connections, Reflect, and Apply

Connect It helps solidify conceptual understanding.

During **Talk About It**, students discuss and crystalize their understanding of key ideas.

The **Reflect** question emphasizes student choice and prepares them to apply their preferred strategy in the Apply It practice.



Apply It encourages students to solve the problems flexibly using any strategy.

Apply It

For all problems, encourage students to draw some kind of model to support their thinking.

- 18; Students may break 3 into 1 and 2, or they may break 6 into 1 and 5, 2 and 4, or 3 and 3.
- 30; Students may also break apart 6 into 1 and 5 (to get $5 + 25 = 30$) or into 3 and 3 (to get $15 + 15 = 30$).

LESSON 4 DEVELOP SESSION 4 ● ● ● ● ● ○

APPLY IT

Use what you just learned to solve these problems.

- Show two different ways to break apart 3×6 . Draw models and write the equations for each model. Show your work.

$3 \times 6 = \dots$

... by breaking apart 6. Show how you broke apart the array.

$(\dots) + (5 \times \dots) = \dots + \dots = \dots$

... expressions can help you find 8×6 ? Choose all that apply.

☐ $(\times 6) + (3 \times 6)$
☐ $+ 3) \times (8 + 3)$
☐ $(\times 5) + (8 \times 1)$
☐ $(\times 3) + (4 \times 3)$
☒ $(6 + 6 + 6 + 6 + 6) + (6 + 6 + 6)$

154 Lesson 4 Multiply with 3, 4, and 6 ©Curriculum Associates, LLC. Copying is not permitted.



The Multiple-Day Lesson Structure in Action: Refine Session

1 Day
Explore
Session

1–3 Days
Develop
Sessions

1 Day

Refine
Session

Give students time to refine their learning from the lesson with practice as rigorous as the California Assessment of Student Performance and Progress (CAASPP). Each lesson ends with dedicated class time to practice and apply lesson concepts and options for one-on-one or small group differentiation activities.

Reteach, Reinforce, or Extend Learning



Monitor students' work on the Start activity and initial problem set.



Assess students' understanding using the Error Analysis guide and observations of students' work.



Provide differentiated options for additional practice and to support students' needs.

Approaching Proficiency:
Provide additional support with the Reteach activity in the Teacher's Guide.

Meeting Proficiency:
Reinforce learning with additional practice problems in the Student Worktext.

Extending Proficiency:
Deepen students' understanding with the Challenge Activity in the Teacher's Guide.

DIFFERENTIATION

RETEACH



Hands-On Activity

Practice breaking apart multiplication facts.

Students approaching proficiency with breaking apart factors will benefit from additional practice with a partner.

- Materials** For each pair: 2 number cubes
- Have each student roll a number cube.
 - Tell each student to multiply the two numbers that they and their partner rolled by breaking apart their own number.
 - Ask: *Did you and your partner get the same product? If not, review each other's work to find the error.*
 - Have each pair repeat the activity several times.



EXTEND



Challenge Activity

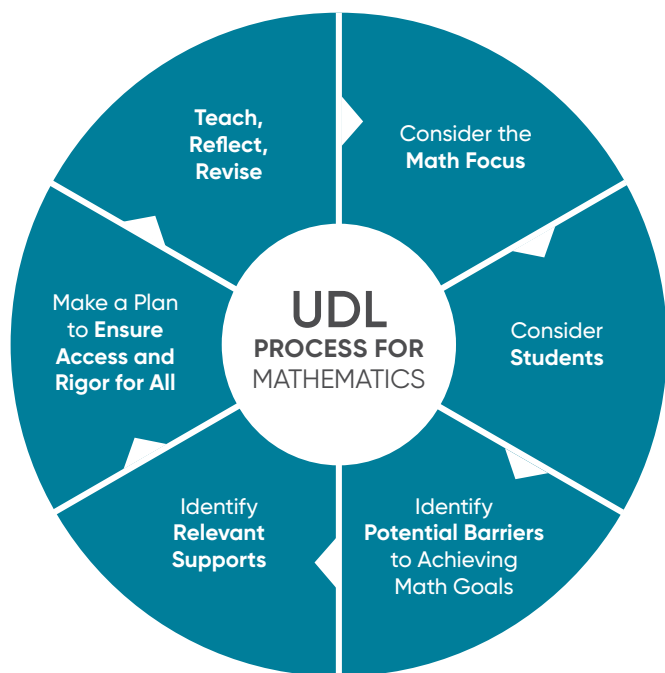
Model an array broken into more than two parts.

Students extending beyond proficiency will benefit from deepening understanding of breaking apart arrays more than once to find products.

- Draw a 12×12 array on the board. Ask: *What multiplication expression is shown by the array?* [12×12]
- Draw a vertical line to break the array into 12×10 and 12×2 arrays. Then draw a horizontal line between the 10th and 11th rows to break the array into four arrays. Ask: *How many arrays are there now?* [4]
- Have students write the facts shown by the 4 small arrays and use them to find the product 12×12 . [$10 \times 2 = 20$; $10 \times 10 = 100$; $2 \times 2 = 4$; $2 \times 10 = 20$; $20 + 100 + 4 + 20 = 144$]

Universal Design for Learning (UDL): Ensuring Classroom Equity

Classroom Mathematics California leverages the UDL Framework and embeds supports throughout the instructional design.



UDL Process Toolkit

This Toolkit, found on the Teacher Toolbox, is a digital resource for instructional materials and supports:

- A planning process that ensures access and equity for all students
- UDL features in the program to maximize full effectiveness
- Best-practice implementation

Principle 1: Design Multiple Means of Engagement

- Features like STEM Stories, Real-World Connections, and Connect to Culture offer culturally sustaining mathematical opportunities.
- Hands-On Activities, Visual Models, and cooperative learning routines provide flexible ways for students to engage with rigorous mathematics concepts.
- End-of-unit Self Reflection encourages students to evaluate their leadership and progress toward unit goals.

The image displays two overlapping activity pages from the Classroom Mathematics California curriculum.

The top page is titled "STEM Stories" and features a "Spotlight On" section for **Argelia Velez-Rodriguez**. It includes a portrait of Argelia and text describing her background and achievements. Below this, there are four panels of illustrations: Argelia in a classroom, Argelia in a math contest, Argelia in a graduation ceremony, and a map showing her journey from Cuba to the USA. The page also contains sections for "Purpose", "Read and Discuss", and "ASK REFLECTION QUESTION 1".

The bottom page is titled "Connect to Culture" and includes a "REFLECT" section with "Use Mathematical Practices" and "Use Models" prompts. It also features a "Pass It On" section for group discussion.

DISCUSS IT *continued*

Explore different ways to understand telling and writing time.

Kiara sits down to eat red beans and rice for lunch at 43 minutes past noon. What time does Kiara sit down to eat lunch? Include AM or PM in your answer.

PICTURE IT

You can use a digital clock to show what time it is.

Noon is 12:00 PM. Kiara sits down at 43 minutes past noon.



MODEL IT

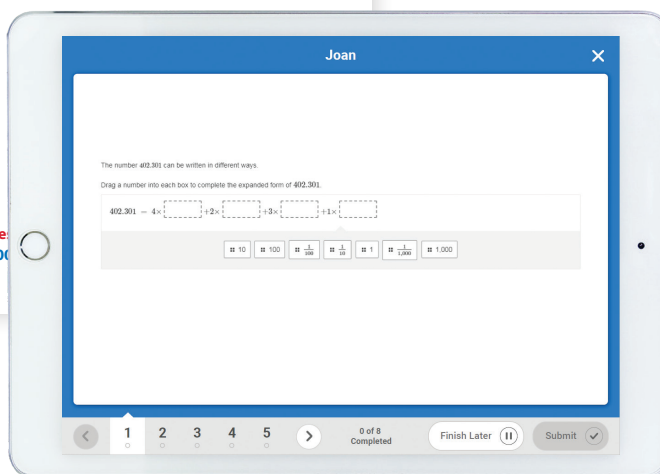
You can also use the next hour to tell what time it is.

Kiara sits down to eat between 12:00 PM and 1:00 PM. You can tell time by saying how many minutes after 12:00. You can also say many minutes before 1:00.

To count the minutes, you always start at the 12.

- **Count forward** to find out how many minutes after 12:00.
- **Count backward** from the 12 to find out how many minutes before 1:00.

By counting backward, you can see that 43 minutes describes the same time as 17 minutes before 1:00.

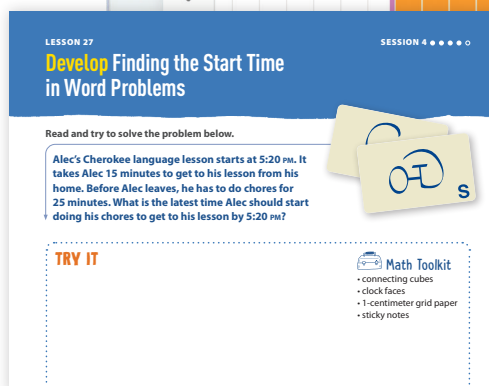
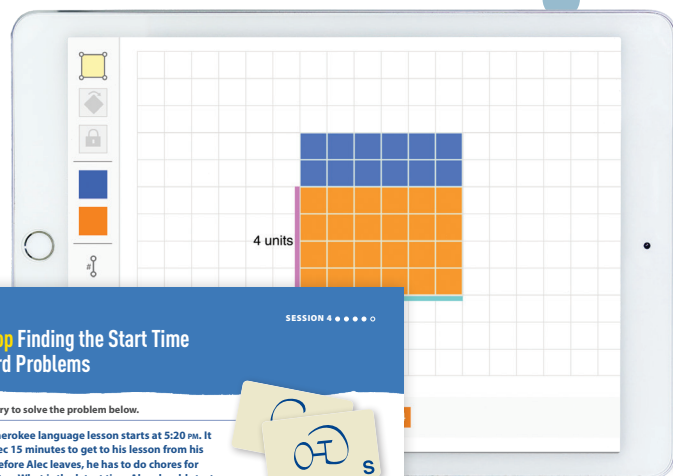


Principle 2: Design Multiple Means of Representation

- Options for language and symbols, like those in Picture It and Model It, are used in class discussion to support understanding.
- Comprehension options include leveraging unitwide Big Ideas, activating prior knowledge, and encouraging sensemaking in problem solving.
- Manipulatives and digital accessibility features, such as the Student Bookshelf and Interactive Practice, reduce learning barriers.

Principle 3: Design Multiple Means of Action and Expression

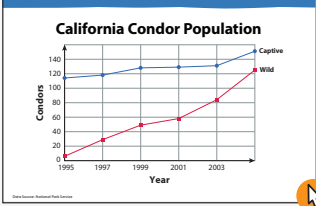
- Expression and communication options, like mathematical manipulatives and virtual tools, enable students to show their knowledge and skills.
- Problems like Try It empower students to see there are many ways to solve a problem.
- Options for interaction like keyboard navigation and digital components enable all students to participate.



Inspire Curiosity with Engaging Data Experiences

Develop data literacy through engaging, real-world activities that enable students to apply and strengthen grade-level mathematics.

START
DEVELOP DATA LITERACY



DATA TALK
Ask students what they notice and wonder.
See Slide Notes.

Background
Human societies influence the well being of California condors and the ecosystems where they live. The data display shows the number of captive and wild California condors each year. Many captive California condors are released and become wild.

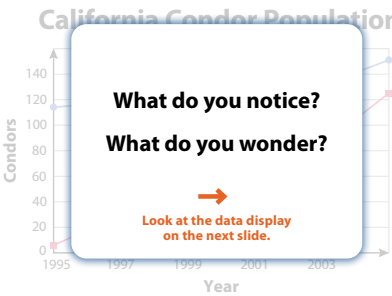
WHY? Support students in interpreting a display featuring whole numbers.

Data Talks

- The content of the lesson ties directly to Data Talks, five- to 10-minute activities during which students explore data, develop data literacy, and apply skills to grade-level content.
- Students work with data graphs, charts, maps, and plots to interpret trends, make observations, and critique displays.

Data Talk slides are provided to prompt student discourse at the beginning of the lesson.

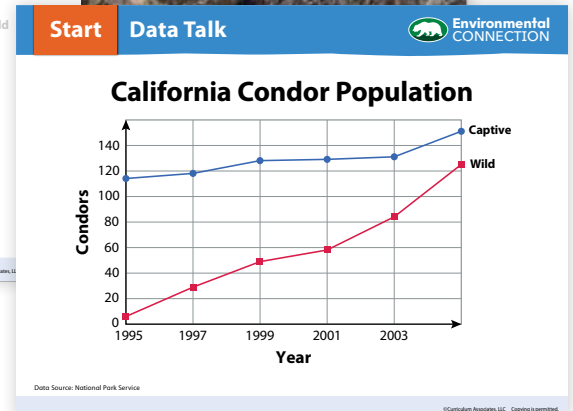
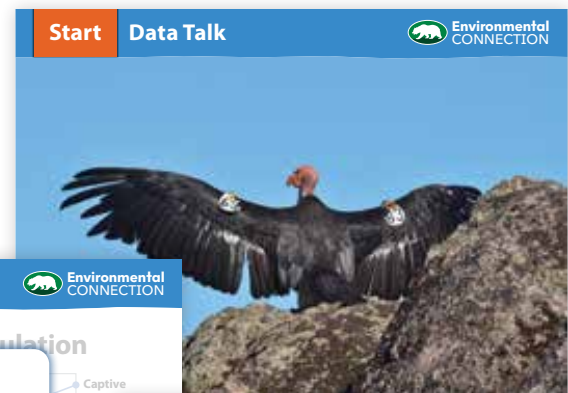
Start
Data Talk

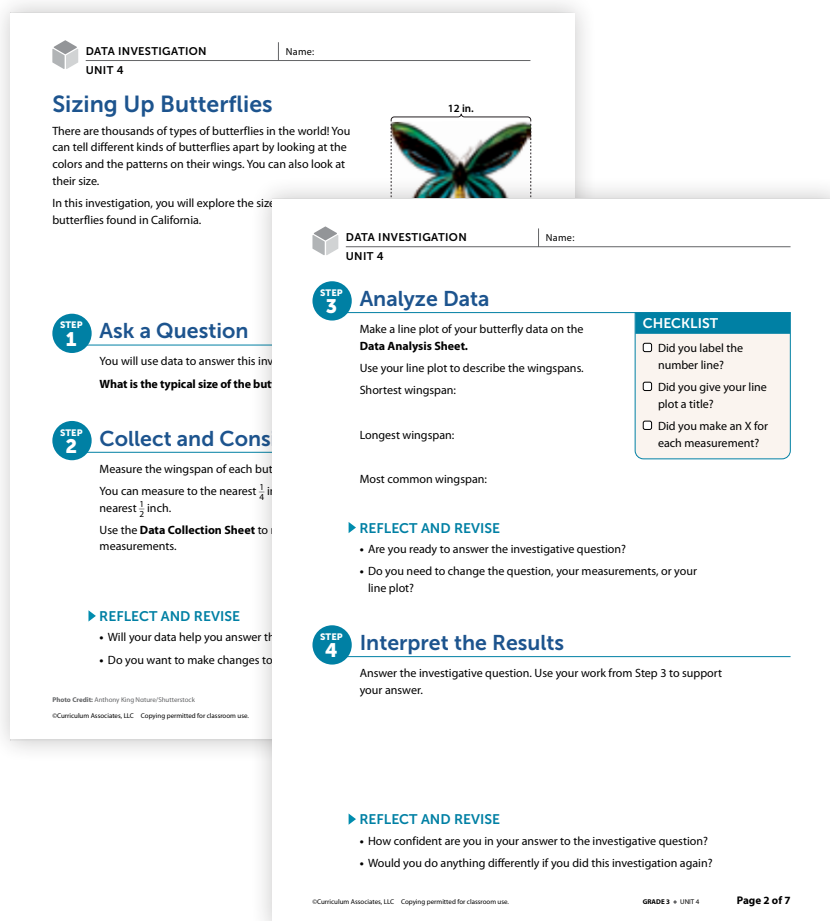


What do you notice?

What do you wonder?

→
Look at the data display on the next slide.





Strengthen grade-level mathematics and Standards for Mathematical Practice with Data Investigations.

Data Investigations

- Flexible implementation gives teachers choice.
- For a deeper dive into data, Data Investigations are two-day activities that seamlessly tie to the mathematical content presented in the unit.
- Simplify or extend different parts in the Investigation to meet the needs of the class and coincide with pacing.

A Four-Step Statistical Problem-Solving Process

Each Data Investigation encourages students to use a statistical problem-solving process.

STEP 1

Ask a Question

Students ask or make sense of an investigative question they will explore.

STEP 2

Collect and Consider Data

Students collect or access data that will help them answer their question.

STEP 3

Analyze Data

Students organize and display their data.

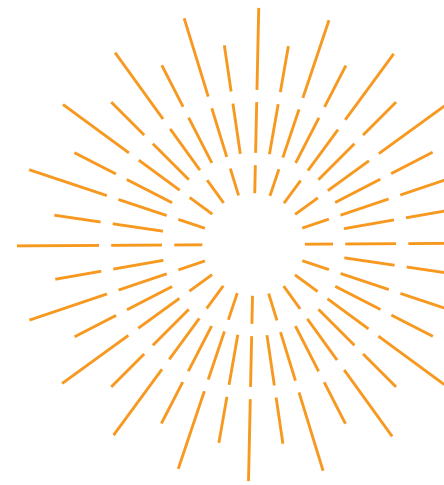
STEP 4

Interpret the Results

Students answer the investigative question.

All California Students Are Math Language Learners

All students, including English Learners, get the support they need to engage with rigorous content.



LESSON 4

Overview | Understand the Meaning of Multiplication

UNDERSTAND: What is going on when you multiply numbers?

This Understand lesson extends students' understanding of how repeated addition can be used to find the total number of items in an array to understanding the meaning of multiplication. Foundational understanding established in this lesson supports students in developing strategies to multiply and divide.

CALIFORNIA STANDARDS

Math Focus

3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each.

See Unit 2 Overview for developing and applied standards.

SMP 2, 3, and 7 are embedded in the Understand lesson structure. See page 1q.

ELD Support

ELD.PI.3.2, ELD.PI.3.6, ELD.PI.3.8, ELD.PI.3.10a, ELD.PI.3.12, ELD.PI.3.1

Objectives

Content Objectives

- Understand that the symbol $\times$ means groups of and that problems such as 5×7 refer to 5 groups of 7.
- Interpret a multiplication problem situation using pictures, objects, words, numbers, and equations.
- Understand that repeated addition and skip-counting are strategies for finding a product, but the meaning of multiplication is finding the total number of items in equal-size groups.

Language Objectives

- Use lesson vocabulary such as *expression*, *factor*, and *product* to describe a multiplication problem.
- Describe how equal groups and arrays show multiplication.
- Compare repeated addition and skip-counting to multiplication in partner and class discussion.

Prior Knowledge

- Understand the concept of equal groups.
- Use repeated addition to find the total objects arranged in arrays or in equal groups.
- Write an equation to express the total in an array or equal groups as a sum of equal addends.

Vocabulary

New Terms

expression an unknown math symbol that is used to find the total number of items in equal-size groups. For example, 5×7 .

factor a number that is multiplied to find the total number of items in equal-size groups. For example, 5 and 7 in 5×7 .

product the result of a multiplication problem.

Review Terms

array a set of rows and equal-sized groups.

equation a math statement that shows an equal relationship between two expressions.

Academic Terms

arrange to put things in a specific order.

Language Objectives

- Language Objectives** are tied directly to the mathematics Content Objectives.
- They address the four domains of language students will understand and use (i.e., listening, speaking, reading, writing) to meet the mathematical objectives.
- Language-related features and resources address the California English Language Development (ELD) Standards and scaffold instruction to support English Learners.

- Assess prior knowledge.**
 - Present the words or phrases. Assess prior knowledge by asking students to rate their knowledge of each term.
 - Provide a scale and ask students to write or signal their rating of each word:
 - Never heard it.
 - Not sure what it means.
 - Have an idea about what it means.
 - Know what it means and can use it.
 - If students are speakers of Spanish or other Latin-based languages, use the Cognate Support routine.
- Pronounce the words.**
 - Say each term and have students repeat it.
- Define the words.**
 - Ask students to share the meanings of terms they know. Note which terms need more instruction or modeling.
 - Model using the terms in familiar contexts.
 - Provide the meaning of the terms. See the Academic Vocabulary Glossary on the Teacher Toolbox.
- Use the words.**
 - Have students write the terms with descriptions or examples and a picture or graphic representation.
 - Encourage students to use the terms in writing and discussion during the lesson and unit.

Cognate Support Routine

- Ask students to identify terms that look or sound similar to words in their home language.
- Check to see if the identified terms are cognates.
- Write the cognates and have students copy them next to the English terms.
- Pronounce the English term and its cognate or ask a volunteer to do so. Have students repeat.

Build Academic Vocabulary helps students become familiar with mathematical vocabulary by asking them to:

- Draw on previous knowledge of the words
- Pronounce the words
- Define the words
- Use the words

DEVELOP ACADEMIC LANGUAGE

WHY? Analyze how adverbial phrases add details to sentences.

HOW? Read Apply It problem 4, emphasizing the adverbial phrases *in the garden*, *in slope-intercept form*, and *in this situation*. SAY: Phrases like these give details about where, how, and when something is done. Help students determine the kind of detail each phrase provides (where, how, or when). Encourage them to use the adverbial phrases when they write their answers.



ELD.PI.8.2, ELD.PII.8.5

- Develop Academic Language** for all students at the word, sentence, or discourse level.
- Focus can be on multiple-meaning words, affixes, word families, irregular verbs, unpacking and constructing complex sentences, and conversation tips.

Supports for Community: Try–Discuss–Connect incorporates UDL principles to give every student a voice and the opportunity to engage with the content in a way that is meaningful to them.

 Try It	 Discuss It	 Connect It
Action and Expression: Students make sense of the problem in a way that engages their identity and honors their prior experience, community, and individuality.	Representation: Partner and whole class discussion place value on students' ideas and contributions.	Engagement: Students make connections to strategies, the underlying mathematics, and each others' thinking and ideas.

Language Routines, Teacher Moves, and Classroom Conversation Tips promote:

- Collaboration and social interaction
- Language use for a mathematical purpose
- Meta-linguistic awareness

Connect to Language: Differentiation to Support English Learners

- Every session includes a support continuum of English proficiency levels, focused on California ELD Standards.
- Encourage scaffolding up.
- Differentiation speaks to specific lesson content and provides guidance for specific activities.

DIFFERENTIATION | ENGLISH LEARNERS
Use with Session 1 Connect It

ELD.PI.3.6 Reading/viewing closely, **ELD.PI.3.2a** Understanding cohesion

Emerging: Reading/Writing	Expanding: Reading/Writing	Bridging: Reading/Writing
Help students make sense of Connect It problem 3. Before reading the problem, have students compare the large and smaller arrays in problem 2. Ask: <i>How are they the same? How are they different?</i> Provide think time before having students turn and talk. Debrief as a group and record ideas. Then read Connect It problem 3 aloud. Clarify that it refers back to the word <i>array</i> . Have students circle it and write the array below. Reread the sentence, replacing it with the array. Allow students to work with a partner complete the sentence frame in writing: • The number does not change because _____.	Help students make sense of Connect It problem 3. Have students read the problem chorally. Discuss the phrase <i>break it apart</i> . Ask students what it refers to. Have them turn and talk. Ask: <i>Why do you think the word "it" is used instead of the phrase "the array"?</i> Discuss the idea of avoiding repetition when speaking and writing. Support discussions as needed. Then have students work with a partner to explain and justify ideas using the model in Connect It problem 2 as a guide. Provide sentence frames to support discussion and writing: • To break apart an array, _____. • The number of items in it _____ because _____.	Help students make sense of Connect It problem 3. Have partners read the problem. Encourage them to discuss the phrase <i>break it apart</i> . Ask: <i>Why do you think the word "it" is used instead of the phrase "the array"?</i> Circulate and support discussions as needed. Have partners re-read the problem and discuss what they are doing when they break apart an array. Encourage them to refer to the model in Connect It problem 2. Circulate and jot down how students use it and relevant phrases, such as <i>still the same</i> , <i>same total number</i> , <i>stays the same</i> , or <i>different groups</i> . Debrief as a group and share the phrases you heard. Ask students to use complete sentences and <i>because</i> or <i>so</i> when explaining their thinking.

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Lesson 6 Multiply with 3, 4, and 6
134a

Build Academic Language for All Students: Justify

This chart is an example of how to help students progress from everyday to academic language. Use with the Academic Language Focus and Formative Assessment Resources.

LESSON 18 EXAMPLE PROGRESSION

LANGUAGE OBJECTIVE: Disagree with a solution or strategy and offer a counterexample during discussion.

Sample Everyday Language

I think [Name] is wrong. I just know it. This part doesn't work when you do it that way.

Academic Language Targets

- Use language related to operations and strategies: *add, subtract, multiply, divide, equations, steps*.
- Use the respectful language of disagreement to give feedback; disagree with the idea, not the person.
- Give a counterexample to support a difference of opinion.

Guidance by Session

- 1–2: Review language of operations and strategies to solve multi-step problems.
- 3: Use Develop Academic Language to introduce effective ways to disagree, including counterexamples. Monitor during whole class discussion.
- 4: In Discuss It, encourage use of respectful language of disagreement and use of counterexamples. Use EL Differentiation to support precise language in opinions.
- 5: Expect students to address language targets in Pair/Shares. Affirm respectful and effective disagreement.

Build Academic Language for All Students highlights

one lesson Language Objective and shows how teachers can help students bridge everyday language to academic language over the course of lesson activities.

Academic Language Focus Resources and Formative Language Assessment

- Each unit has an Academic Language Focus, such as Explain, Compare, or Justify.
- Students learn the focus, then practice and get feedback on their progress.
- Teachers can use the Formative Language Assessment Recording Sheet to monitor progress.

ACADEMIC LANGUAGE FOCUS UNIT 1 • EXPLAIN

Academic Language Focus: Explain

In this unit, students **explain** how to use place value to round and to add and subtract three-digit numbers.

How to EXPLAIN in Unit 1

- Use terms about place value like *ones, tens, hundreds, place, break apart*, and *regroup* so that listeners or readers know exactly what is meant.
- Tell each step in a solution in order. Use connecting words like *first, next, then, last*, and *finally* to help the listener or reader understand what to do.
- Refer to a model or math work to help make the explanation clear.

Sample Academic Language

First, find the two text the number falls between. Then find the halfway number. If the number you are rounding is equal to or greater than the halfway number, round to the greater ten. If your number is less than the halfway number, round to the lesser ten.

Culturally and Linguistically Responsive Mathematics

Validate and affirm students' cultural connections, experiences, and aspirations by integrating them into the instruction so students see themselves in the mathematics.

Celebrate the Student

Problems, activities, and images make mathematics relevant to California students as they see themselves and their classmates in the content.




LESSON 17 SESSION 2

There are 2 classes for Mexican folk dance. There are 8 students in each class. How many students take Mexican folk dance class?

4 What information is unknown?

5 Write an equation for the problem. Use f to stand for the number you need to find. Solve the problem.

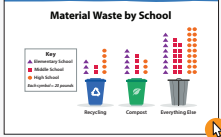


...n folk dance class.

...ssons. There are 3 students in each ...nts are there?

START **DEVELOP DATA LITERACY**

Material Waste by School



DATA TALK
Ask students what they notice and wonder. See Slide Notes.

Background
The display shows the amount of composting, recycling, and other waste generated by three schools. Each kind of waste produces byproducts that can affect natural systems. The byproducts' effects can be detrimental, or neutral.

EP&C 4 Opportunity

WHY? Support students in strategies to interpret a display.

Background
The display shows the amount of composting, recycling, and other waste generated by three schools. Each kind of waste produces byproducts that can affect natural systems. The byproducts' effects can be beneficial, detrimental, or neutral.

EP&C 4 Opportunity

California's Environmental Principles and Concepts (EP&Cs):

- Emphasize the close relationship between humans and the natural environment
- Appear in every lesson, giving students the opportunity to explore and apply them



STEM Stories inspire students to learn about mathematicians from different backgrounds and highlight the Standards for Mathematical Practice that were modeled in the story.

STEM Stories

Read and Discuss
Continue the conversation about Argelia's Value-Addition.

Argelia's Value-Addition
Argelia's Value-Addition is a story about a young girl who is passionate about mathematics and science. She is inspired by her grandmother, who is a mathematician. Argelia's story is a testament to the power of family and the importance of pursuing your dreams.

Read and Discuss
Ask students to read the story and discuss the following questions:

- What is Argelia's dream?
- How does her grandmother inspire her?
- What challenges does Argelia face?
- How does Argelia overcome these challenges?

OPTIONAL STEM ACTIVITY
Have students create a comic strip about Argelia's story. They can use the provided template or create their own. The comic strip should include the following elements:

- Argelia's dream.
- Her grandmother's inspiration.
- The challenges she faces.
- How she overcomes them.

STEM Stories

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- The challenges she faces.
- How she overcomes them.

Encourage Home Language

The **Cognate Support** routine at the start of each unit encourages English Learners to use their first language so they can make associations to academic words.

Cognate Support

- Ask students if any of the academic words look or sound similar to a word in their first language. Have students circle those words in their books.
- Check to see if the words students have selected are cognates.
- Explain to students that words in two languages that share the same or similar meaning, spelling, and pronunciation are called cognates.
- Write the cognates and have students copy them in their book next to the academic words.
- Say each of the cognates aloud or ask a native-speaker volunteer to model pronunciation and have students repeat.

Cognates for Academic Vocabulary in Unit 4

ACADEMIC WORD	SPANISH COGNATE
compare	<i>comparar</i>
decide	<i>decidir</i>
represent	<i>representar</i>

Connect to Culture

- Use these activities to connect with and leverage the diverse backgrounds and experiences of all students. Engage students in sharing what they know about contexts before you add the information given here.

Session 1 Use with Try It.

Ask students to raise their hand if they have ever seen a crab. Tell them that Providencia black crabs live on a few small Colombian islands in the Caribbean such as Providencia, San Andrés, and Santa Catalina. These crabs have black shells and red legs with yellow marks. The black crabs are important to the people living on these islands because many of them eat them. To help sustain them from April to July.

Session 4 Use with Apply It problem 9.

Ask students to raise their hands if they have ever taken their shoes off when entering someone's home. The practice of removing one's shoes at the door can be found in many households and is particularly common in households with Asian customs. In Japan, the area by the door where you would remove your shoes is called the *genchiyo*.

Connect to Culture

- Use these activities to connect with and leverage the diverse backgrounds and experiences of all students. Engage students in sharing what they know about contexts before you add the information given here.

Connect to Culture invites students to share their own experiences to connect the mathematics to their own lives.

Protocols for Engagement	Where in Lesson	Validates
Buddy Read During the Three Reads routine, the teacher reads the first time and students read, taking turns with a partner, the second and third times.	Session 1 Try It: Make Sense of the Problem	collective success, social interaction
Stand and Share Students stand when they have something to share with the class.	Session 2 Connect It: Facilitate Whole Class Discussion	spontaneity, movement, subjectivity, connectedness
Call and Response Teacher calls and students respond. For example, I say "STOP, LOOK," you say "LISTEN."	To start class and/or bring students back together after breakout work	group identity, connectedness

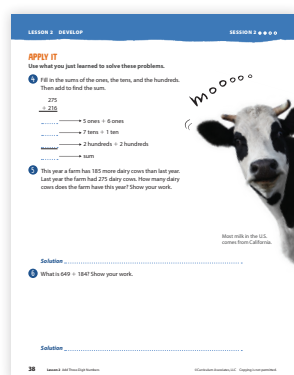
Protocols for Engagement use cultural communication modes while structuring activities to welcome all students' participation.

Practice That's Just Right

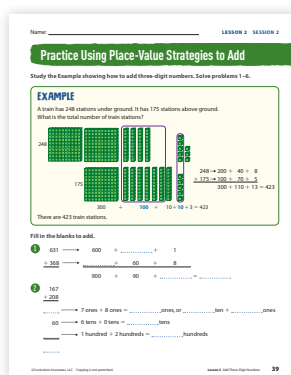
Robust practice options, digitally and in print, means all students have the right practice with the rigor of the California Common Core State Standards for Mathematics for deep conceptual understanding and procedural fluency.

Lesson-Level Practice Opportunities

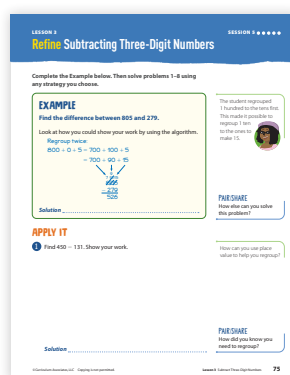
Student Worktext



Apply It Problems



Additional Practice

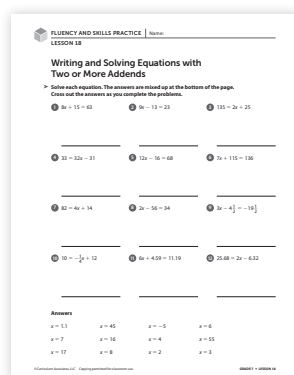


Refine Sessions

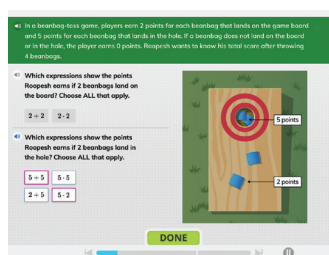
Apply It problems are found in every lesson and encourage students to solve the problems flexibly using any strategy.

Additional Practice appears in every session. Students build proficiency with the strategies learned in class and apply those ideas to answer critical-thinking questions and new problems.

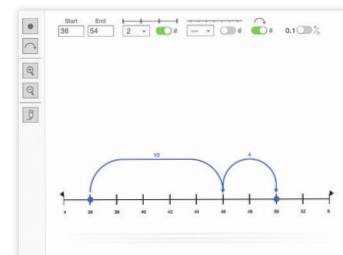
Teacher Digital Experience



Fluency and Skills Practice



Assignable Interactive Practice



Personalized Instruction

Fluency and Skills Practice

is optional targeted practice that uses patterns and repeated reasoning to build mathematics skills. Available as a student workbook or as PDFs on the Teacher Toolbox.

Interactive Digital Practice is assignable and auto-graded digital practice that reinforces understanding. Teachers receive performance reports, while students receive immediate, meaningful feedback to keep them on track.

Personalized Instruction is an optional add-on that provides lessons designed to accelerate growth and grade-level learning.

Unit-Level Practice Opportunities

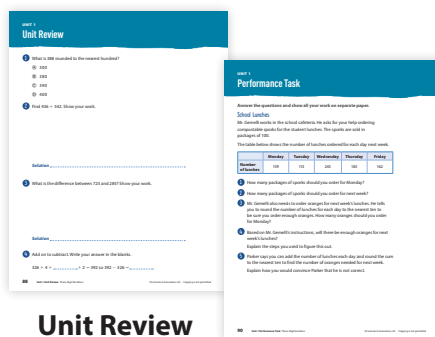
Teacher Digital Experience



Unit Games

Unit Games are a fun way to review unit content.

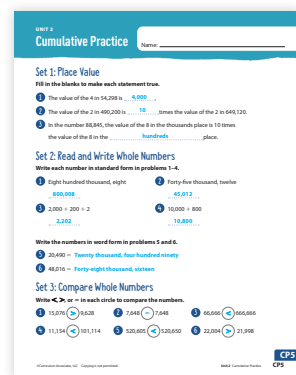
Student Worktext



Unit Review

Performance Tasks

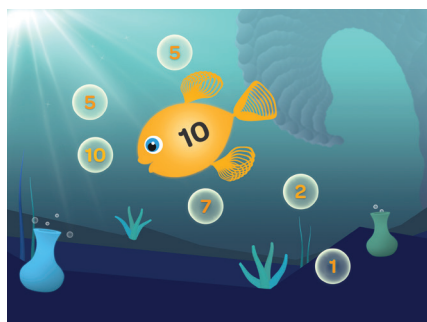
Performance Tasks are problems that tie to Depth of Knowledge levels, the California standards, and the CAASPP and its claims.



Cumulative Practice

Spiral Review and Cumulative Practice is available in every unit. Students revisit previously learned content to deepen their understanding and retention.

Practice Opportunities for Any Time



Grade Level Games



Fluency Flight

Grade Level Games help Grade 2 students build fluency and understanding of critical concepts.

Fluency Flight is a collection of personalized digital activities that help students achieve automaticity of essential mathematics facts with understanding.



Digital Math Tools



Learning Games

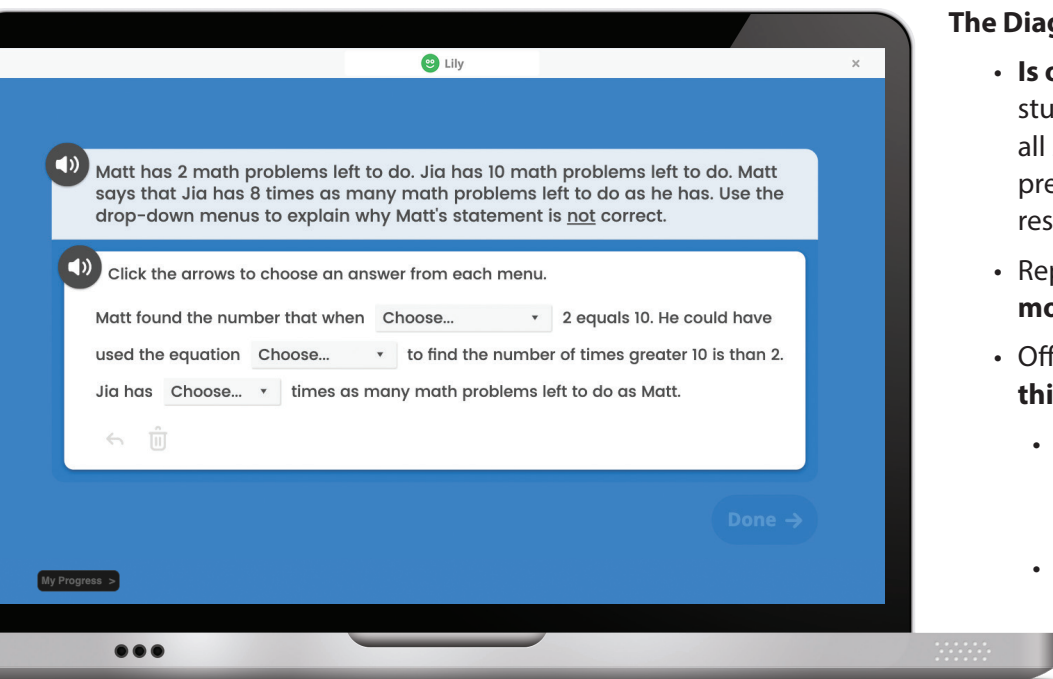
Digital Math Tools is a full suite of virtual math manipulatives that allows students to explore mathematical concepts using multiple models.

Learning Games offer a multisensory approach to engaging students in fluency practice in a low-stakes setting.

See What They Know

Classroom Mathematics California includes print and digital assessments to understand student learning and inform next instructional steps, including differentiation.

Assess Prerequisite Skills

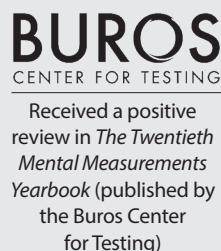


The Diagnostic, a prerequisite screener:

- **Is online, adaptive,** and pinpoints students' strengths and needs across all skills and domains while addressing prerequisites efficiently with curated resources
- Replaces unit assessments, which means **more time for teaching**
- Offers validity and reliability **vett**ed by **third parties**
 - **Criterion referenced:** Compare students' performance against the standards.
 - **Norm referenced:** Compare students' performance to other students.

State and Nationally Recognized

Numerous third parties have deemed the Diagnostic as a valid and reliable academic screener and progress monitoring tool.



Accelerate Learning for All Students

The Grade-Level Planning (Prerequisites) report helps you understand every student's needs as related to upcoming grade-level lessons.

- 1 Learning Progression:** Understand the progression of standards going back two-plus years.
- 2 Gain better insight into class-level prerequisite needs:** Access tips on how to maximize whole class, grade-level instruction.
- 3 Access embedded teacher-led, small group, and independent resources** for individual skills at point of use.

Grade-Level Planning (Prerequisites)

Subject: Math | Class/Report Group: I. Graves - Grade 4, S... | Grade: 4

Unit: Unit 3 (Lessons 14–16)

Know the Math: Classroom Mathematics California | Major themes of unit

Unit Overview

Unit 3: Multi-Digit Operations and Measurement: Multiplication, Division, Perimeter and Area
In Lessons 14–16 of this unit, students use what they know about place value, multiplication, and division to divide three- and four-digit numbers by one-digit divisors. They will also build on the...

[+ Show More](#)

[Unit Flow and Progression \(03:23\)](#)

1 Learning Progression

2 Identify Class Prerequisite Needs

3 6 8 3

Group A Group B Group C Group D

Unit Group A
Understand Grouping
3 Students

Unit Group B
Understand Grouping
6 Students

Unit Group C
Understand Grouping
8 Students

Unit Group D
Understand Grouping
3 Students

[View All Students](#)

Maximize Whole Class Instruction

Focus on grade-level instruction, integrating On-the-Spot Teaching Tips to support students' connections to prerequisite skills. As needed, use the Recommended Resources to provide additional support for addressing prerequisite content ahead of upcoming lessons.

[Unit and Lesson Support \(On-the-Spot Teaching Tips\)](#)

[Yearly Pacing for Prerequisites](#)

3 Prerequisite Skills for Upcoming Instruction

As you plan upcoming instruction, consider recommended resources for prerequisite skills while maintaining pace with grade-level instruction.

Lesson 14: Divide Three-Digit Numbers

Lesson 15: Divide Four-Digit Numbers

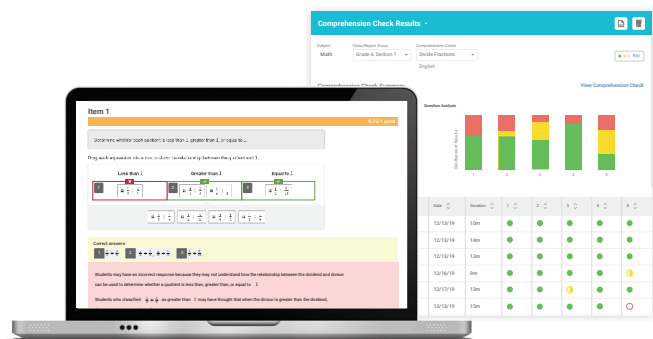
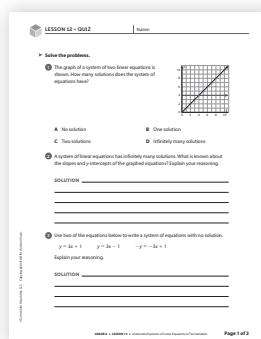
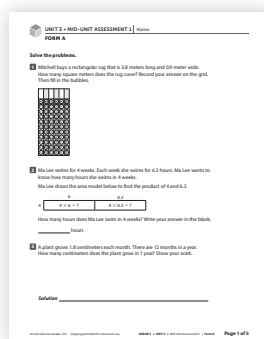
Understand the relationship between multiplication and division
(Priority Prerequisite Skill)

3 6 8 3

Group A Group B Group C Group D

[View Resources](#)

Assess Student Understanding and Monitor Progress



Paper/Pencil Lesson Quizzes and Unit Assessments

- Download as PDF or editable Microsoft Word® document.
- Assign resources to Google Classroom or any learning management system (LMS).

Comprehension Checks

- Comparable to Lesson Quizzes and Unit Assessments
- Assign premade version or customize to add/remove questions.
- Auto-graded; provides instructional next steps

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Differentiation

Classroom Mathematics California integrates UDL principles to create instructional goals, methods, materials, and assessments that work for differentiating instruction for all students.

Grade-Level Planning (Prerequisites)

Subject: Math | Class/Report Group: I. Graves - Grade 4, S... | Grade: 4

Unit: Unit 3 (Lessons 14–16)

Know the Math: Classroom Mathematics California
Unit Overview

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+ Show More

Unit Flow and Progression (03:23) | Learning Progression

Identify Class Prerequisite Needs

3 6 8 3

Group A Group B Group C Group D

Unit Group A: Understand Grouping (3 Students)
Unit Group B: Understand Grouping (6 Students)
Unit Group C: Understand Grouping (8 Students)
Unit Group D: Understand Grouping (3 Students)

View All Students

1 Unit and Lesson Support
On-the-Spot Teaching Tips suggest additional scaffolding to accelerate learning as needed.

2 Yearly Pacing for Prerequisites
provides guidance on when and how to use Prerequisite Lessons to accelerate learning as needed throughout the year.

3 Embedded Recommended Resources

Save time searching for small group resources to maintain pace with on-grade level instruction.

Grade-Level Planning (Prerequisites)

← Back

Recommended Resources for Prerequisite Skill:
Understand the relationship between multiplication and division (Priority Prerequisite Skill)

Supporting: Lesson 14: Divide Three-Digit Numbers, Lesson 15: Divide Four-Digit Numbers, (Grade 4, Unit 3)

View Resources: All Students

3 6 8 3
Group A Group B Group C Group D

Focus on grade-level instruction, emphasizing connections to prerequisite skills. Consider small group instruction as time permits.

Prerequisite skill learning progression for Lessons 14, 15

Grade 3: Understand the Meaning of Division (Lesson 10) → Grade 3: Understand How Multiplication and Division Are Connected (Lesson 11) (Priority Prerequisite Skill)

Teacher-Led Small Groups

Solve Problems Involving Equal Shares | Relate Multiplication and Division

Student-Led Small Groups

Understand How Multiplication and Division Are Connected

Center Activity: Use Related Fact | Find the Missing Number

Observe and Evaluate Student Understanding Using:

LESS FORMAL

Start Activities
Try–Discuss–Connect
Framework
Language Routines
Hands-On Activities

Self-Check
Practice
Exit Ticket
Big Ideas Organizer
Formative Language
Assessment

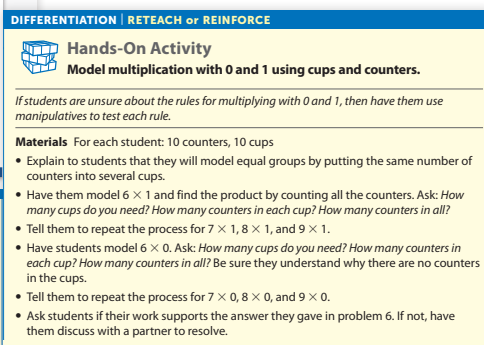
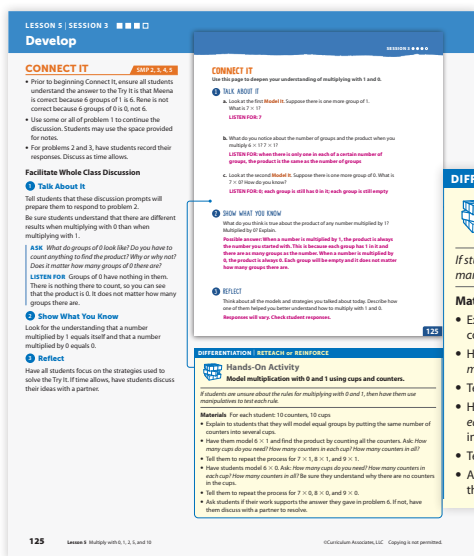
MORE FORMAL

Grade-Level Planning (Prerequisites)
Comprehension Checks
Lesson Quizzes
Mid-Unit Assessments
Unit Assessments

Formal and informal
assessment options
gather data that will
inform differentiation.

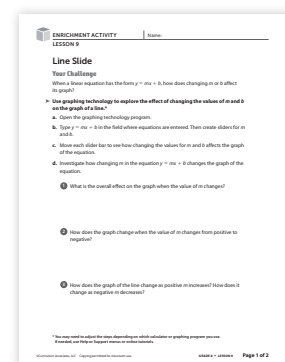
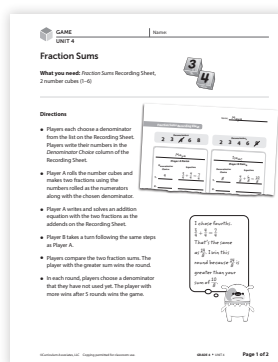
Differentiate during a Session

Yellow boxes in the Teacher's Guide
provide differentiation at point of use.



Differentiate after a Lesson

Examples include:



Independent Reinforcement

Learning Games offer fun,
challenging, and personalized
practice and help students
develop a growth mindset.

Differentiated Math Center Activities

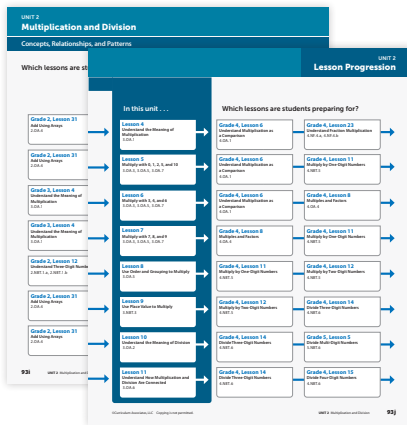
Leveled Math Center Activities
are collaborative games that
reinforce concepts and skills.

Extension

Enrichment Activities challenge
students with higher-order
thinking tasks.

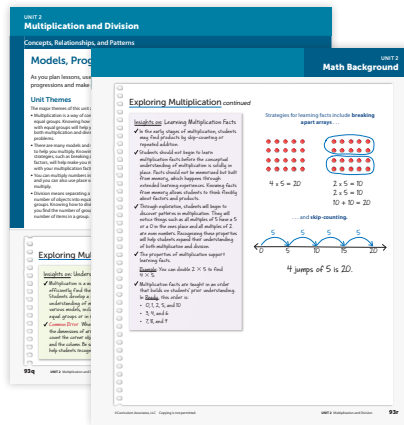
Support That Works for You

Find a range of professional learning materials, both in print and digitally, to enrich instruction for a wide range of learners.



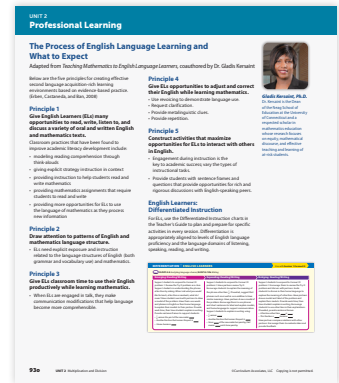
Lesson Progression

See the progression of previous, current, and future lessons to help students develop conceptual understanding.



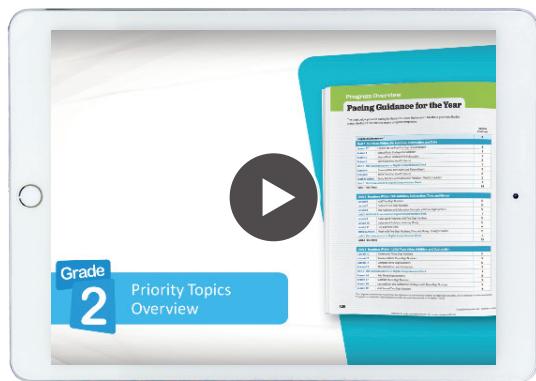
Math Background

Review the Mathematical Models and Strategies used in the unit to better understand how models fit into the learning progression.



Professional Learning

Each unit provides a different professional learning article with guidance and support for teachers.

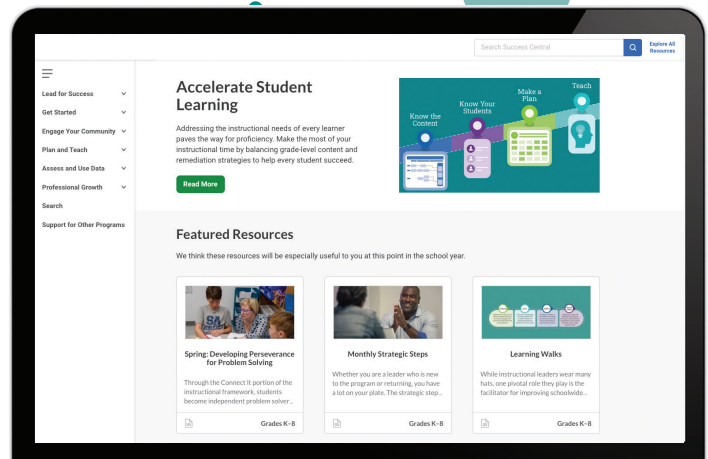


Pacing Video Series

Stay on track to deliver all grade-level content by the end of the year.

Implementation Guidance and More

From how-to tips to planning tools, get on-demand access to everything teachers need on *i-Ready Success Central*.



Empowering Families to Support Students at Home

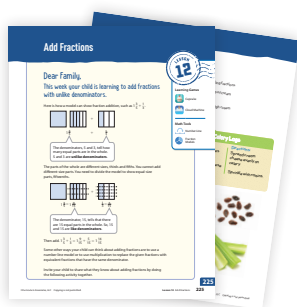
Give families the resources at home to extend learning beyond the classroom.



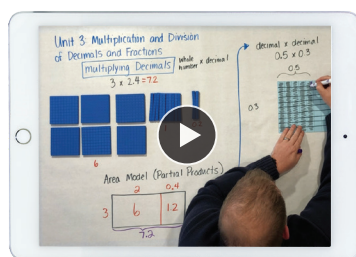
Resources to Help Teachers Engage Families

Find resources on Success Central that make family communication easier, including:

- **Introduction Letter:** Introduce families to the curriculum.
- **Family Night Presentation:** Give families an overview of the program.



Family Letters

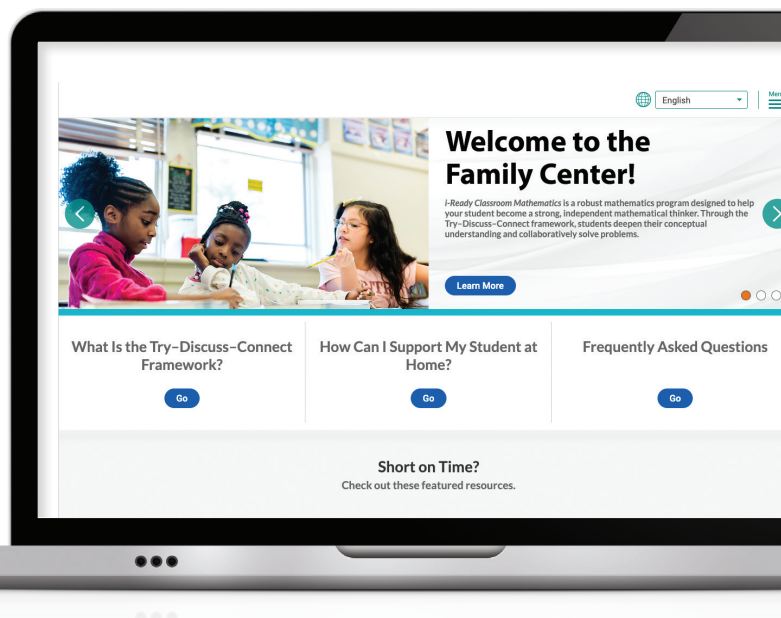


Unit Flow & Progression Videos

- The **Family Resources tab** on the Student Bookshelf, where online access for student resources can be found, has **Family Letters** in 11 languages for every lesson that describe the mathematics being learned in family-friendly terms and offer an activity related to the lesson.
- The **Unit Flow & Progression Videos** help families support their student with the ideas and concepts taught in the curriculum. Closed captioning is available in English and Spanish.

Support Website Dedicated to Families

The Family Center, available in English and Spanish, helps families explore the program and provide support at home.



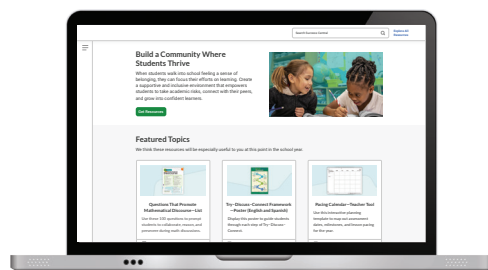
Teacher Components



Volumes 1 and 2

Teacher's Guide E/S

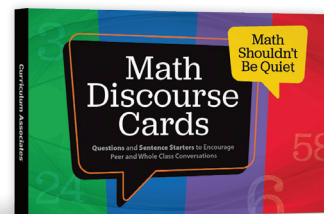
Two volumes include discourse-based instructional support, math background, and embedded professional learning.



Anytime Professional Learning

Success Central, the implementation support site, provides:

- Training videos
- Planning tools
- Implementation tips
- Whitepapers
- Discourse support E/S
- Digital courses



Discourse Cards E/S

Questions and sentence starters help engage all students in meaningful mathematical conversations.

Teacher Digital Experience includes:

Teacher Toolbox

- Interactive Tutorials E/S
- Digital Math Tools
- Presentation slides E/S
- Fluency and Skills Practice** E/S
- Math Center Activities E/S
- Tools for Instruction E/S
- Enrichment Activities E/S
- Print assessment resources E/S
- Assessment Practice Book E/S (also available in print)
- Unit Flow & Progression Videos*
- Literacy Connections E/S
- Grade Level Games (Grade 2) and Unit Games E/S
- Data Investigations E/S

Interactive Practice and Report E/S

- Assignable online practice provides students with immediate, meaningful feedback.
- Report shows student performance.

Learning Games Reports

- Identify playtime breakdown for each game for a selected time interval.
- See a real-time snapshot of performance on the standards.
- Track students' choices with respect to content that is challenging for them:
 - Growth Mindset
 - Productive Strategy
 - Confidence
 - Self-Regulation

Comprehension Checks and Reports E/S

- Save time with these assignable, auto-graded assessments comparable to the print Lesson Quizzes, Mid-Unit Assessments, and Unit Assessments.
- Use the data in the reports to determine the next steps for differentiation.

Grade-Level Planning (Prerequisites) Report

Use the data and resources outlined in the Grade-Level Planning (Prerequisites) report to address unfinished learning, either during small group instruction or whole class instruction, depending on the needs of the class.

E/S = Available in English and Spanish

*Closed captioned in English and Spanish

**Fluency and Skills Practice available as a student workbook for additional purchase

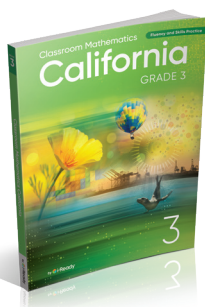
Student Components



Volumes
1 and 2

Student Worktext E/S

Students take ownership of their learning as they work through rich tasks and practice new skills in each lesson.



Fluency and Skills Practice Book E/S

Targeted practice that uses patterns and repeated reasoning. Available on Teacher Toolbox as PDFs and editable files assignable to any LMS, including Google Classroom.



Hands-On Materials E/S

Classroom Manipulative Kits and Individual Student Manipulative Bags are available.

Student Digital Experience includes:

Student Bookshelf E/S

This component provides online access to the Student Worktext along with many additional digital features that make it easy to navigate and personalize learning:

- Note-taking
- Text-to-speech
- Highlighting
- Calculator
- Multilingual Glossary

Family Resources

- Family Letter for every lesson E/S
- Unit Flow & Progression Videos*

Learning Games E/S

Interactive Learning Games help students gain a rich conceptual understanding of mathematics concepts, improve fluency, and develop a positive relationship to challenge.

Interactive Digital Practice E/S

This assignable, digital resource provides practice that reinforces understanding. Students receive immediate, meaningful feedback to keep them on track.

Digital Math Tools

A full suite of Digital Math Tools allows students to explore mathematics concepts using multiple models.

Fluency Flight

A suite of personalized digital activities and games helps students in Grades 2–5 achieve automaticity of essential mathematics facts with understanding and without speed anxiety.

E/S = Available in English and Spanish
*Closed captioned in English and Spanish



Classroom Mathematics California

Classroom Mathematics California is rooted in a history of success. It is built on the foundation of *i-Ready Classroom Mathematics* ©2024 Edition, which earned **perfect scores** on EdReports. This history, combined with capturing the vision of the California framework, ensures high-quality instructional materials for California students.



Learn More at
ClassroomMathematicsCalifornia.com

