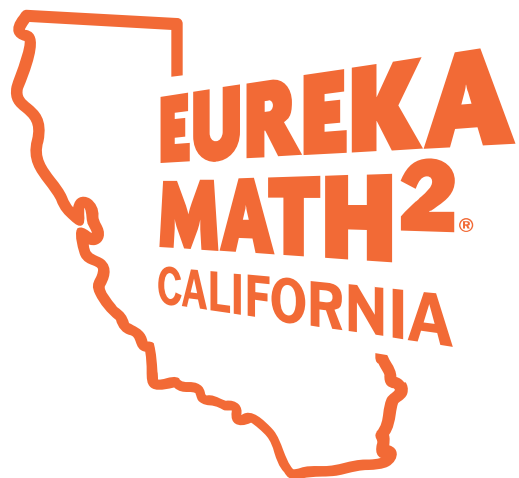




GRADES 6–8 • ALGEBRA I

Program Overview



Deeper Thinking.
Greater Growth.





Deeper Thinking. Greater Growth.

At Great Minds®, we believe that all students are capable of greatness—and all teachers deserve high-quality, research-proven instructional materials that foster more “aha!” moments.

Eureka Math² California is a coherent, evidence-based core mathematics curriculum that helps teachers deliver on the vision of the California Mathematics Framework. Designed to empower students and teachers, *Eureka Math² California* centers instruction on student equity and success and helps all learners build a more confident math mindset.

With *Eureka Math² California*, teachers can:



Prepare for high school with a **Coherent Design**



Build rich understanding through **Cognitive Engagement**



Foster a classroom culture that instills **Confident Learning**

Table of Contents

Research Foundations	Coherent Design	Cognitive Engagement	Confident Learning	Professional Development	<i>Eureka Math² California</i> Components
1	2–5	6–7	8–15	16–17	18–21

Build Lasting Confidence That Leads to Real Results

Eureka Math² California gives teachers a clear and coherent path to help every student build a confident math mindset. That's why the topics, concepts, and mathematical models follow a consistent sequence. The instructional approaches are a strategic blend among conceptual understanding, explicit and systematic fluency, and application—all intentionally driven by student learning outcomes.

The Strategic Blend



Conceptual Understanding

Daily lessons include representations and simple-to-complex progressions to develop understanding.

A New Language

Students write ratios and use multiplicative comparison language and ratio language to describe relationships between quantities. [🔗](#)

Have students think back to part 1 of the Unfair Tokens video. Display the picture of three cups.



Procedural Fluency

Daily fluency activities and distributed and spiraling practice provide opportunities for students to grow in mathematical fluency.

How many rhombuses of each type do you think we need to make two of Kelly's tiles? How do you know?

To make two tiles, I think we need 10 dotted rhombuses and 14 shaded rhombuses. There are 5 dotted rhombuses and 7 shaded rhombuses in 1 tile, so I added 5 more dotted rhombuses and 7 more shaded rhombuses to find how many rhombuses of each type we need for 2 tiles.

Display the pattern with two of Kelly's tiles.



Application

Real-world problems and collaborative tasks consolidate student thinking, inviting students to draw conclusions and make deep connections.

Display the yellow and blue tape diagrams with 7 yellow units and 3 blue units with a bracket labeled to show a total of 30.



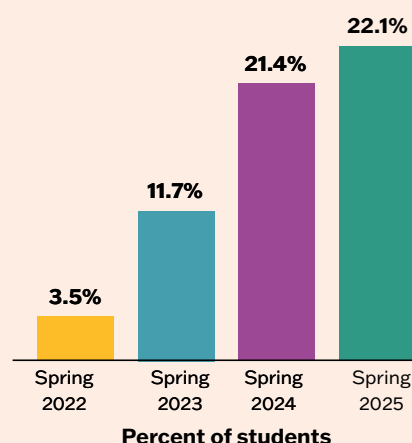
How many pints of green paint did Noah have before adding more blue paint? How do you know?

Noah had a total of 30 pints of green paint before he added more blue paint. Each unit in the tape diagram represents 3 pints, so 10 units represents 30 pints.

Growth in the Numbers

Evidence shows that coherence supports student growth. At San Tan Heights, math proficiency increased with *Eureka Math²*, rising 18.6% over four years (spring 2022 to spring 2025).

Students Scoring as Proficient or Advanced on MAP Math Assessment



Source: Johns Hopkins University Efficacy Study for San Tan Heights (2022–2024); Spring 2025 MAP data for San Tan Heights (2020 norms)



When Math Connects, It Makes Sense

Effective knowledge-building requires coherence and the connectivity of ideas.

Eureka Math² California is intentionally designed so learning builds logically and meaningfully over time. With the concrete foundation built in the *Eureka Math² California* K–5 program, students can enter grades 6–8 and Algebra 1 ready to extend their understanding. Coherence is the structure that anchors instruction, connects Big Ideas, and helps students make lasting sense of mathematics.



Coherence Strengthens Learning:

Across Grades and Modules:

Students build knowledge steadily and confidently through a logical progression across grades and modules that connect Big Ideas over time.

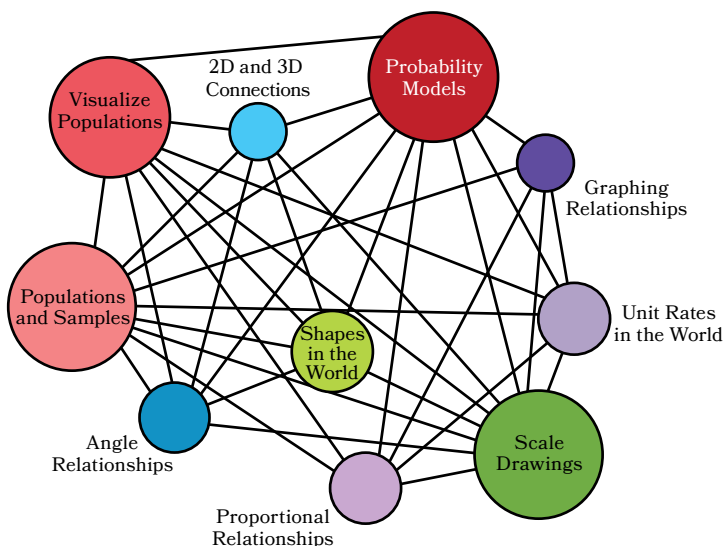
Through Routines:

With intentionally integrated instructional and language-rich routines across lessons, students consistently reason, explain, and communicate ideas.

Through Models:

High-leverage models such as number bonds, tape diagrams, and area models remain consistent across grades, helping students apply the same logic, even as the units and calculations grow more complex.

Rather than teaching math as isolated topics and ideas, *Eureka Math² California* follows an intentional, coherent structure—ensuring deep and enduring conceptual understanding.



Big Ideas

The Big Ideas shape student learning in *Eureka Math² California* and allow students to make connections across modules and grade levels. By seeing math as a story, students build deep and enduring conceptual understanding.

Following a logical and systematic mathematical progression, *Eureka Math² California* contains a consistent, research-backed lesson model to help students manage their cognitive load and engage in richer learning. Each lesson provides intentional emphasis and rigor on every element of learning: daily fluency, conceptual understanding, and application.

Consistent Lesson Model



Every lesson begins with **Fluency** as a warm-up.

Launch hooks students into the day's lesson through inquiry.

Learn introduces new content gradually and coherently.

Land provides closure and realignment to the learning objective.

Students Will

Access prior knowledge and build automaticity



Students Will

Freely explore and discuss new concepts



Students Will

Tackle grade-level standards by working through Problem Sets of varying complexity



Students Will

Complete the Exit Ticket and Recap



Teachers Will

Deliver daily practice that is foundational for the day's lesson



Teachers Will

Provide familiar instructional routines that build confidence and conceptual understanding



Teachers Will

Introduce strategies and guide all students by using Universal Design for Learning



Teachers Will

Lead a debrief that reinforces and consolidates learning





The Student Learning Arc

Learning progressions that prepare students for algebra

Eureka Math² California shows learning progressions across grade levels and modules visibly and intentionally so teachers can see how learning progresses, and students can see how their learning is built upon their foundational knowledge. *Eureka Math² California* shows teachers how learning builds over time through connected Big Ideas and how to identify and adjust instruction to remove misconceptions and drive toward proficiency for all.



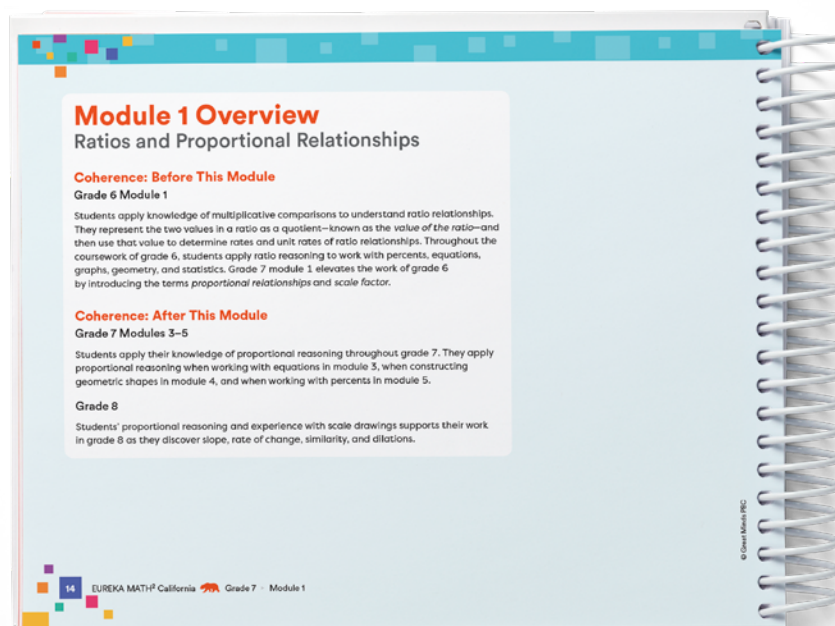
Achievement Descriptors and Proficiency Indicators

Standards-aligned Achievement Descriptors detail what students should know and be able to do. Understand the skills and knowledge that students will develop by the end of the module while keeping track of their progress throughout the module and the school year.



Before and After This Module

View brief overviews of when and how the foundation was laid for the module so teachers can internalize the right instructional approach and help students make connections to their learning.



The Why Behind the Lesson Design

Understand how and why this lesson brings concepts together to support the broader student learning arc and to support teachers in making strategic instructional decisions.

IMPACT INTEL



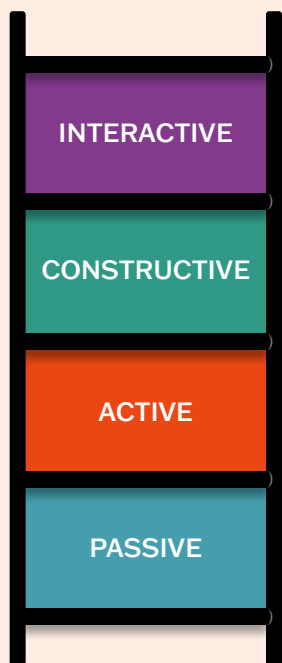
There's not a bit of the curriculum that isn't written to be thoughtful, intentional, and coherent."

– Ryan Redd, Math Specialist, New Hanover County Schools, North Carolina



Build Rich Understanding Through Meaningful Engagement

Eureka Math² California leverages the learning of science-defined engagement to build deep conceptual understanding. Lessons are intentionally structured to fuel meaningful discourse, drive productive struggle, and spark curiosity. This depth of cognitive demand strengthens retention and leads to improved long-term learning outcomes.



Climbing Up the Engagement Ladder

Not all engagement forms produce the same results. *Eureka Math² California* lessons are designed to move students up the engagement ladder, supporting them as they climb toward reasoning and mathematical independence.

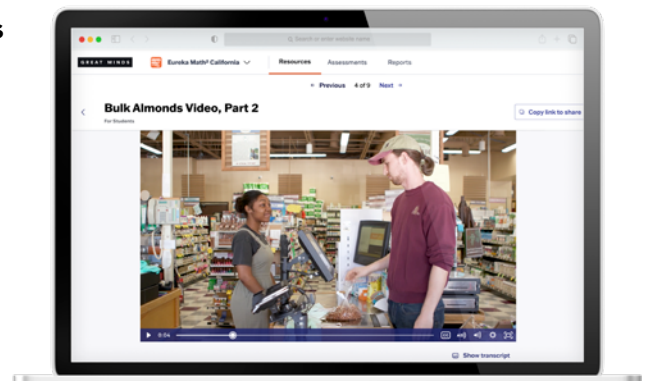
Micheline T. H. Chi and Ruth Wylie, "The ICAP Framework: Linking Cognitive Engagement to Active Learning Outcomes," *Educational Psychologist* 49, no. 4 (2014): 219–243, <https://doi.org/10.1080/00461520.2014.965823>



Active Engagement Through Context-Rich Sense-Making

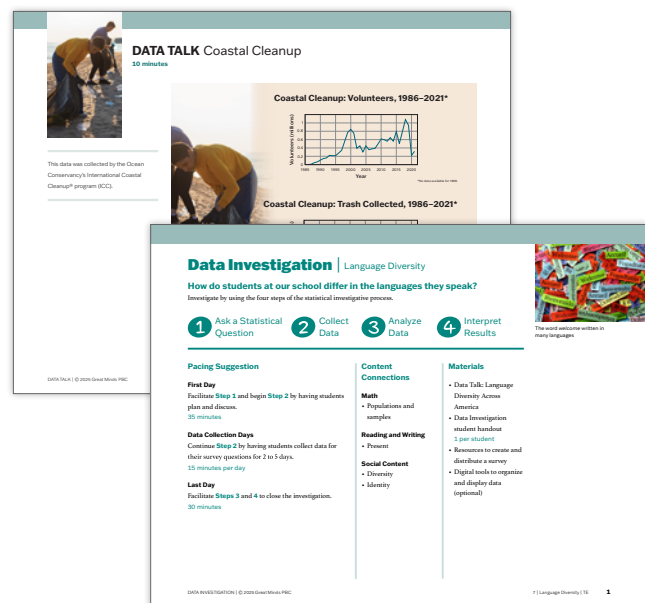
The *Eureka Math² California* digital platform provides opportunities for accessible entry points into mathematical thinking. **Wordless context videos** enable students to notice, wonder, and engage in the sense-making of real-world mathematical situations.

The **digital interactives** allow students to test their ideas, compare strategies, and analyze what different solution paths reveal.



Constructive Engagement Through Collaboration

With **Data Talks** and **Data Investigations**, students interpret data through rigorous, accessible, and discussion-rich experiences that spark curiosity and critical thinking. These 10-minute activities invite students to collect and interpret data, share observations, question assumptions, and build a shared understanding through a team activity.



Interactive Engagement Through Peer Discourse

Eureka Math² California equips teachers with **Mathematical Language Routines** to strengthen peer discourse and deepen conceptual understanding. These structured routines support students in asking clarifying questions, explaining their reasoning in their own words, and refining ideas through discussion. As students articulate and revise their thinking, they move beyond surface participation and toward constructive and interactive engagement.

IMPACT INTEL



Teaching math has become more exciting because students are the ones driving the learning. When teachers step back and create space for student thinking, discourse, and discovery, the classroom comes alive.”

– Dr. Brian Lack, Forsyth County Schools,
K–8 Mathematics Curriculum and Instruction Specialist



Addressing Varying Student Needs to Build Confident Learners

When teachers are supported by comprehensive, lesson-embedded guidance, they can create classrooms where every learner thrives. *Eureka Math² California* integrates Universal Design for Learning principles, language and terminology development, differentiation supports, and meaningful practice to provide equitable learning and lasting confidence for all learners.

Teacher Note

The dialogue shown provides suggested questions and sample responses. To maximize every student's participation, facilitate discussion by using tools and strategies that encourage student-to-student discourse. For example, make flexible use of the Talking Tool, turn and talk, Think-Pair-Share, and the Always Sometimes Never routine.

Universal Design for Learning: Representation

Presenting the coin-sorting machine in a video format supports students in understanding the problem context by removing barriers associated with written and spoken language.

Promoting Mathematical Practice

When students look for patterns while repeatedly calculating the unknown values for the number of coins sorted, time, and unit rate, they are looking for and expressing regularity in repeated reasoning.

Ask the following questions:

- What patterns did you notice when you were finding and using unit rate?
- Will these patterns always work?
- How can these patterns help you fill in the table more efficiently?

Multilingual Learner Support

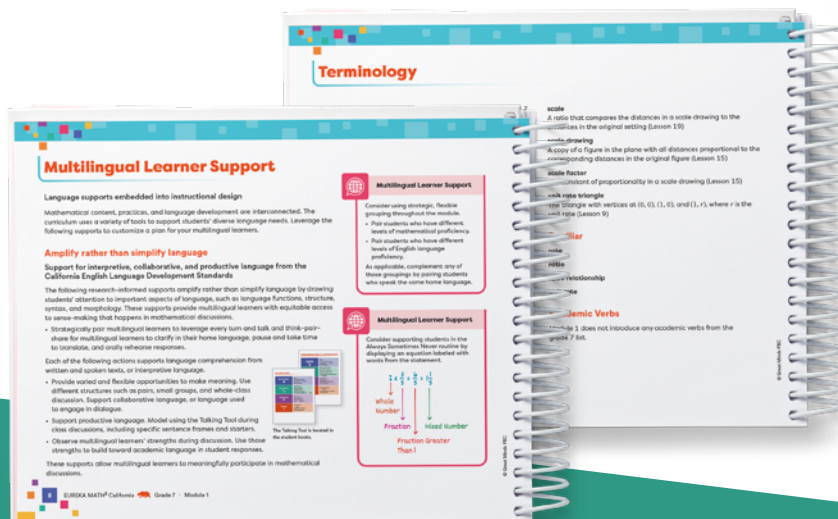
In Land, students use a graphic organizer to begin formalizing terminology and phrases. They will refer to this graphic organizer throughout the topic as they discover new characteristics of proportional relationships.

Embedded Teacher Guidance

Eureka Math² California instruction includes embedded margin notes throughout each lesson to clarify task purpose, anticipate potential misconceptions, and offer prompts for discourse and reasoning so that teachers are equipped to support all learners.

Language Support

Throughout each lesson, *Eureka Math² California* embeds language supports—including multilingual learner support, mathematical language routines, and terminology—to provide teachers with clear and practical strategies.



IMPACT INTEL

“ We didn't learn math this way, but our kids have a greater understanding of math than we did, and they can explain it.”

**– Jeanette Ramsey, Director of Teaching and Learning,
Northwest Public Schools Grand Island, Nebraska**



Differentiation: Challenge

If groups finish early, have them return to other examples of relationships that are proportional or not proportional from lessons 2 and 3. Have students graph the relationships represented in the tables and reflect on the completeness of their description of a proportional graph.



Differentiation: Support

To succeed in this lesson, students need to know how to find the constant unit rate of a proportional relationship. Use student work on the lessons 2 and 3 Exit Tickets to gauge student understanding. If a student needs additional support, consider analyzing one table. Have the student add a row or column to the table. Calculate the unit rate for each ordered pair in the table and write the unit rate in the added row or column. Compare the values to see whether they are constant.

Differentiation Support

Teachers can build student confidence through lesson-embedded differentiation that allows the whole class to feel challenged and supported. These real-time instructional tools empower teachers to differentiate and address student needs immediately, without disrupting the flow of instruction.

Meaningful Practice

Through meaningful practice, *Eureka Math² California* provides spiral review and simple-to-complex problem sets that help students deepen understanding and confidently master mathematical concepts.

TOPIC A
LESSON 1

Name _____ Date _____

PRACTICE

I can use ratio and rate reasoning to compare ratio relationships and calculate rates.

1. Machine A and machine B sort paper at a constant rate. Machine A sorts 150 pieces of paper every 6 seconds. Machine B sorts 90 pieces of paper every 4.5 seconds. Which machine sorts paper more quickly?

2. Machine C sorts paper at a constant rate. If it sorts 143 pieces of paper every 6.5 seconds, how many pieces of paper does machine C sort in 10 seconds?

3. At a farm market, peaches are priced at a constant rate.

a. Complete the following table.

Number of Pounds of Peaches	Total Cost (dollars)
0.5	1.10
	4.40
6	
	11.00

b. Using the table in part (a), how can you determine the price of one pound of peaches? What is the price per pound of peaches?

EUREKA MATH² California Grade 7 • Module 1 • Topic A • Lesson 1

SPIRAL REVIEW

For problems 4–7, multiply.

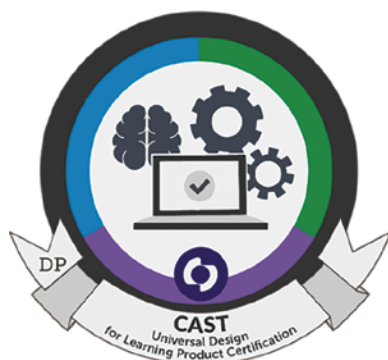
4. $4 \cdot \frac{1}{2}$ 5. $3 \cdot \frac{1}{10}$ 6. $\frac{1}{2} \cdot 2$ 7. $\frac{1}{10} \cdot 7$

8. If 4 people share 9 cups of popcorn equally, how many cups of popcorn does each person get?

9. For every 5 apples that a fruit stand sells, it sells 3 oranges. Complete the table.

Number of Apples Sold	Number of Oranges Sold
5	3
10	
	9
25	

EUREKA MATH² California Grade 7 • Module 1 • Topic A • Lesson 1 • PRACTICE



Universal Design for Learning

On top of *Eureka Math²* being awarded the CAST (Center for Applied Special Technology) Universal Design for Learning Product Certification, *Eureka Math² California* is the only math curriculum to receive a CAST certification for accessibility and product design.

We are advancing equity in math education—ensuring every learner can reach success with confidence.

UDL: Engagement	UDL: Representation	UDL: Action & Expression	Differentiation
Support motivation and enthusiasm	Support perception and comprehension	Support expression of learning and executive function enthusiasm	Offer additional support and provide challenge



Reach Every Learner

Universal Design for Learning principles remove barriers to learning.

Learner variability in math classrooms is expected, so *Eureka Math² California* ensures that all students are given the opportunity to engage and succeed by proactively removing learning barriers through incorporation of the Universal Design for Learning (UDL) principles.



Provide Multiple Means of Engagement

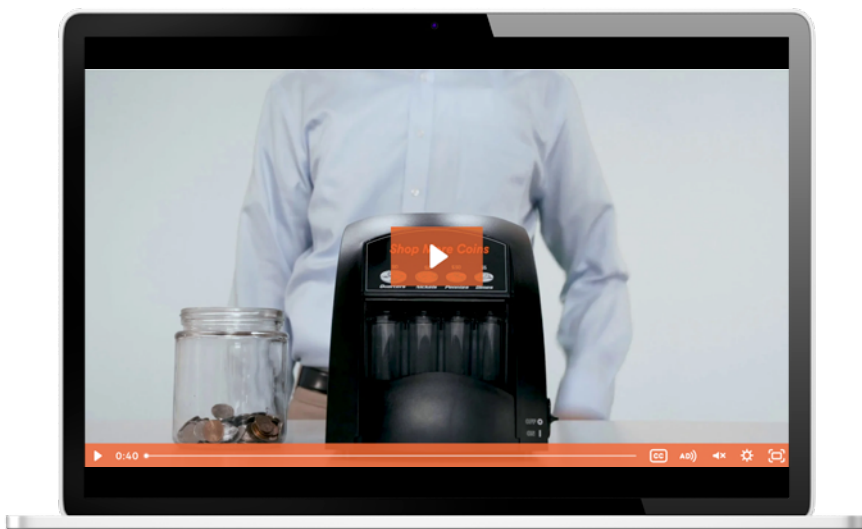
Learners are motivated in different ways. That's why *Eureka Math² California* supports all learners with choice, relevance, and routines that build ownership and confidence.

Support Learning Through Varied Representation

To ensure all learners have an entry point into the math, *Eureka Math² California* uses multiple strategies, tools, and models to present the content.

Encourage Multiple Means of Action & Expression

To support students in navigating their learning, *Eureka Math² California* provides flexible strategies and tools so all learners can show their understanding.

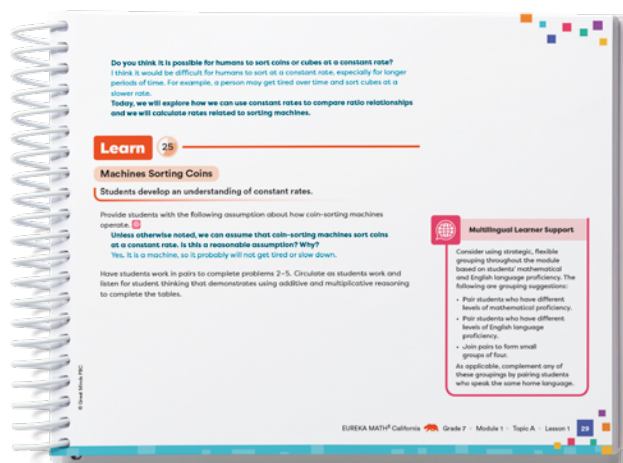


Universal Design for Learning: Representation

Presenting the coin-sorting machine in a video format supports students in understanding the problem context by removing barriers associated with written and spoken language.

Multilingual Learners: Supporting Every Voice

Strong math instruction integrates language development with every lesson. Math is not just about finding answers; it's about engaging in discourse where students reason, explain, and justify ideas using precise academic language.

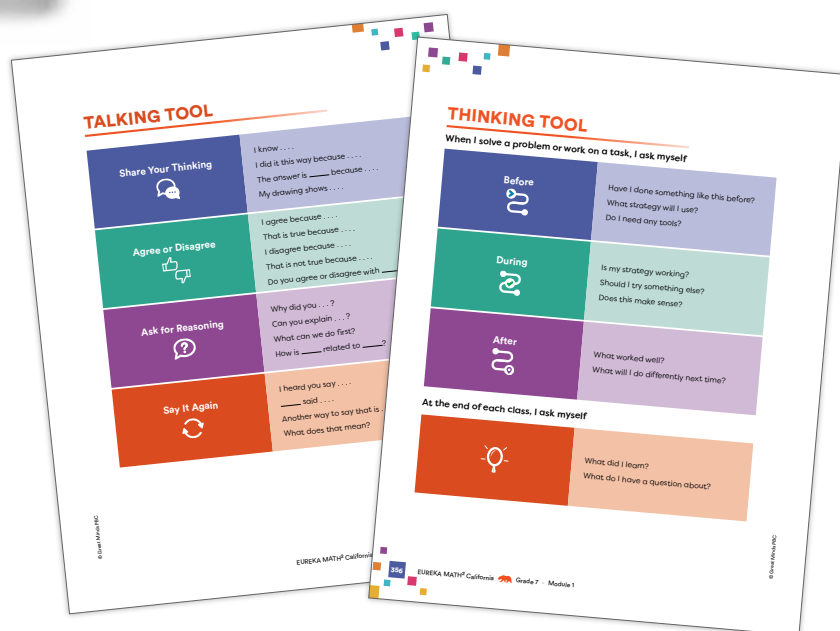


Using an Asset-Based Approach to Language Development

To empower each learner, *Eureka Math² California* provides clear language supports that are embedded into every module to honor students' home language and help them achieve math success.

Leveraging Language and Thinking Scaffolds

To build on students' strengths, *Eureka Math² California* includes a Talking Tool to support multilingual learners in discourse and language production while the Thinking Tool supports metacognition.



Utilizing Daily Language Objectives

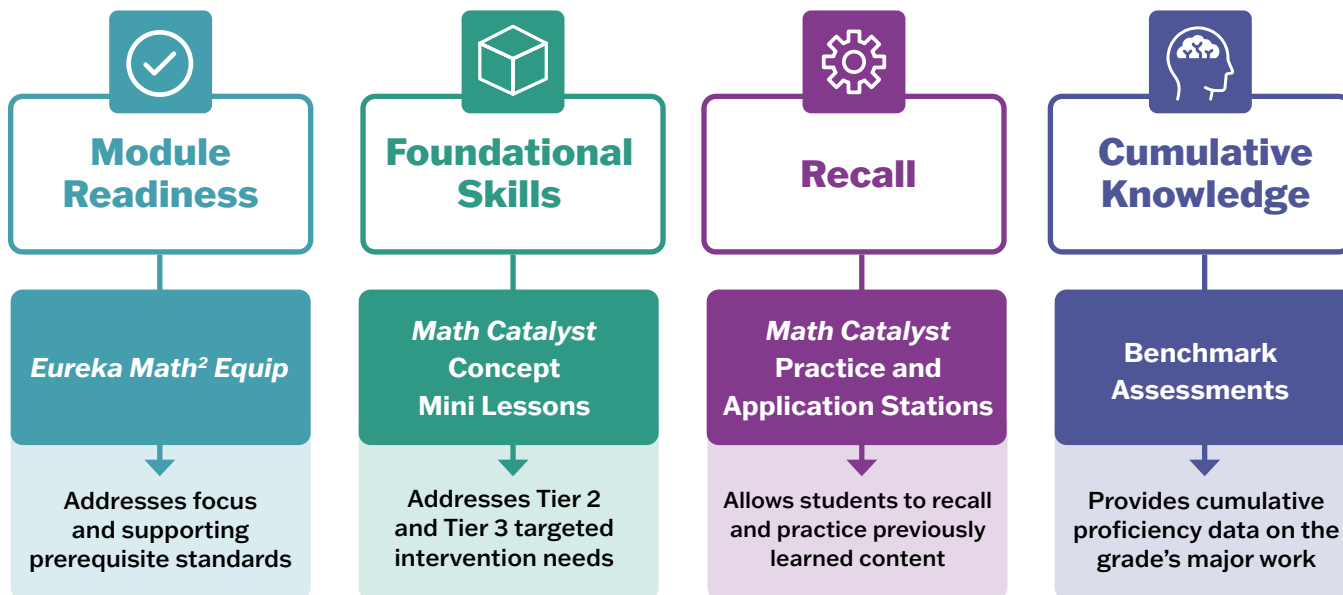
To help every learner develop their mathematical language, *Eureka Math² California* lessons identify the language objectives and instruction for domain-specific vocabulary and academic language development.



Data and Differentiation

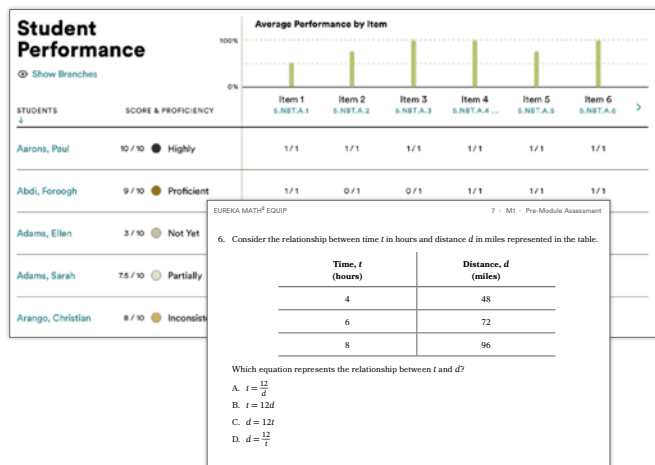
*Eureka Math*² California assessments are simple and flexible pathways that reflect classroom realities and respect teacher expertise. With *Eureka Math*² Equip®, *Math Catalyst*™, and Benchmark Assessments, teachers can collect data, monitor progress, and respond with targeted instruction.

Pathways to...



Clear Insight into Prerequisite Skills with *Eureka Math*² Equip

Before learning begins, a diagnostic assessment powered by *Eureka Math*² Equip provides teachers with a clear picture of students' readiness for upcoming modules. This pinpoints unfinished learning before gaps widen. *Eureka Math*² Equip includes digital premodule assessments, reporting tools, and acceleration plans to ensure all students are prepared for new instruction.



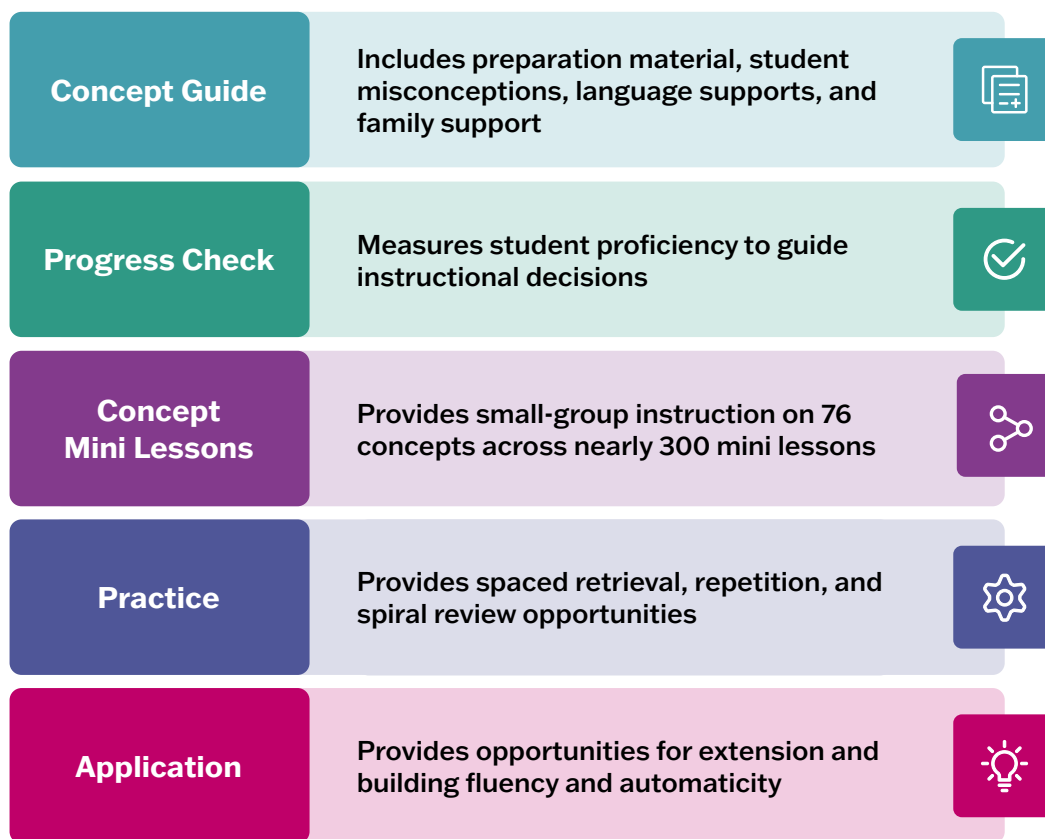
Benchmark Cumulative Proficiency

Benchmark Assessments make student growth visible over time. These assessments provide a cumulative view of proficiency, which demonstrates overall understanding. They are administered three times a year to assess learning across recent modules and the grade's major work.

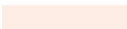
Targeted Intervention with *Math Catalyst*

Math Catalyst provides teachers with targeted resources that reinforce *Eureka Math*² California learning. Spanning seven strands, *Math Catalyst* supports students through spaced retrieval practice and through targeted Tier 2 and Tier 3 intervention that aligns with K–5 standards.

Each strand includes a progression of concepts, and each concept includes the component listed below, for use in small group instruction, during dedicated What I Need (WIN) blocks, study hall, and after-school tutoring.



Strand	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Early Numeracy								
Place Value								
Addition								
Subtraction								
Multiplication								
Division								
Fractions as Numbers								

-  Address on-level practice, remediation, and advanced learning
-  Address learning gaps in any grade



Assessment That Moves Learning Forward

Eureka Math² California incorporates a balance of assessment pathways designed to monitor student progress and guide instruction. With a variety of diagnostic, formative, and summative assessments, teachers receive data and insights that reduce the guesswork and strengthen their ability to deliver responsive, targeted, and effective instruction.



Formative Assessments

These built-in progress monitoring tools verify whether students are on track and provide teachers with quick information they can funnel into action to meet the needs of all their students.

Exit Tickets

Grade 1–Algebra I

- After each lesson, teachers see where every student stands, and students pause to reflect on their own learning.

EXIT TICKET

I can use ratio and rate reasoning to compare ratio relationships and calculate rates.

TOPIC A LESSON 1

1. Dylan folds 5 paper airplanes in 2.5 minutes. Do you think he folds 10 paper airplanes in 5 minutes? Explain your thinking.

2. For a STEM competition, students build machines that fold paper airplanes. Machine A folds 60 paper airplanes in 0.5 minutes. Machine B folds 400 paper airplanes in 4 minutes. Each machine folds paper airplanes at a constant rate.

How many paper airplanes does machine A fold in 5 minutes? Justify your solution.

Observational Assessment Recording Sheets (OARS)

Transitional Kindergarten–Algebra I

- Teachers can use these sheets in every topic as a qualitative checklist that captures student progress on learning goals.

Observational Assessment Recording Sheet

Grade 1 Module 1 Topic A

Ratios and Proportional Relationships

Understanding Proportional Relationships

Standards	Achievement Descriptors	Dates and Details of Observations
7.BP.A.1	7.Mod1.AD1 Compare unit rates associated with ratios of fractions given within contexts.	
7.BP.A.2.a	7.Mod1.AD2 Recognize proportional relationships.	
7.BP.A.2.b	7.Mod1.AD3 Identify the constants of proportionality in proportional relationships.	
7.BP.A.2.c	7.Mod1.AD4 Represent proportional relationships given in contexts with equations.	
7.BP.A.2.d	7.Mod1.AD5 Interpret the meaning of any point (x, y) on the graph of a proportional relationship in terms of the situation, including the points (0, 0) and (1, r), where r is the unit rate.	

Topic Tickets and Topic Quizzes

Grade 1–Algebra I

- After each Topic, teachers can digitally assign Topic Quizzes and access real-time scoring and performance data to monitor student understanding.

Topic Quiz A

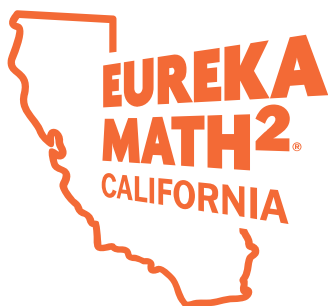
EUREKA MATH² California Edition

7 · M1 · TA · Topic Quiz A-1

Name _____ Date _____

1. The table shows a proportional relationship between the number of floor tiles and the area of a tiled floor.

Number of Floor Tiles	Area of Tiled Floor (square feet)
6	27
14	63
26	117
40	180



Summative Assessments

These ready-to-use, standards-aligned tools measure application and proficiency with major concepts and skills, enabling teachers to assess not only what students know but also how effectively they can apply their learning in a variety of contexts.

Performance Assessment

Kindergarten–Algebra I

- Teachers can engage and assess students in high-interest, knowledge-rich scenarios that require students to apply their understanding and demonstrate real-world problem-solving skills.

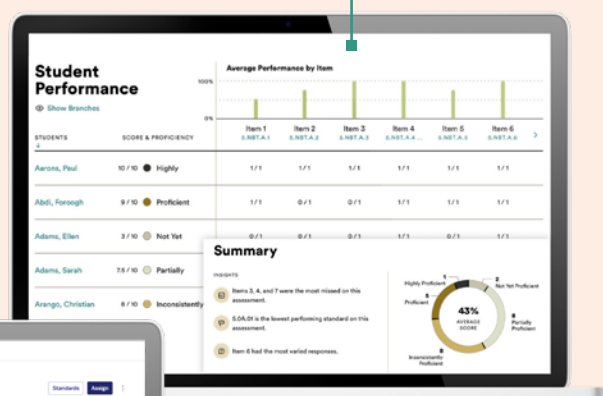
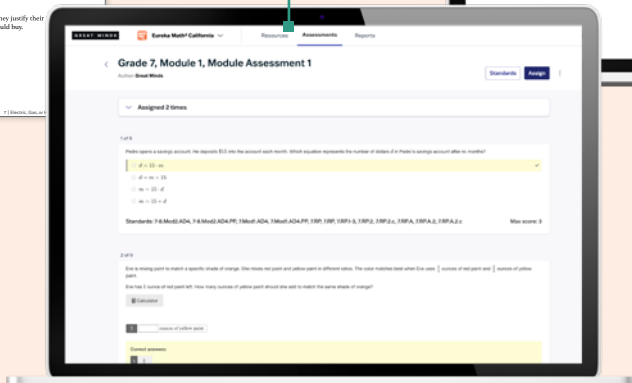
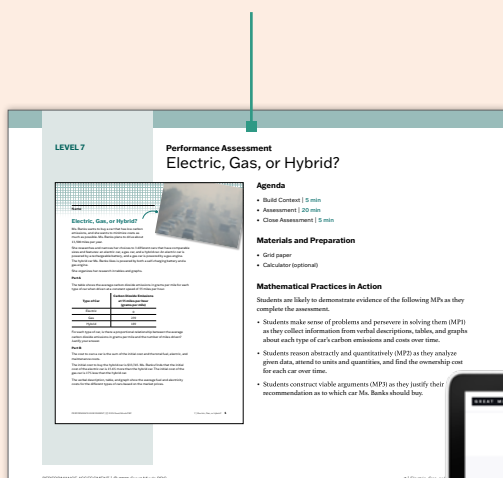
Module Assessments

Transitional Kindergarten–Algebra I

- At the end of each module, teachers can digitally assign assessments for grades 1 and up and aggregate results by standard to quickly identify strengths and areas for reteaching.

Assessment and Reporting

- Teachers can use the digital platform to assign and score assessments, track progress, and generate reports that provide clear visibility into class trends and individual student performance.



Where Partnership Meets Purpose

Educators deserve more than training—they deserve partnership. We don’t just deliver professional learning; we build lasting confidence. Because when teachers feel confident, students thrive.

Through workshops, coaching, consulting, and on-demand tools, we help teachers deepen their practice, strengthen lesson execution, and build sustainable systems for growth. Every partnership is tailored to a district’s evolving needs—whether launching a new program or refining established practices—with one shared goal: **lasting success for teachers and students.**



Unlock the Power of Professional Learning

Our hands-on, feedback-driven support helps teachers bring knowledge-rich instruction to life, ensuring every student experiences the joy of learning deeply.

We partner with schools and districts to design implementation support plans that meet unique needs while engaging teachers, school leaders, and instructional coaches in shared growth.

Professional Learning Services



Workshops

Foundational, curriculum-aligned learning experiences



Coaching

In-context, hands-on support to tailor instruction and sustain implementation



On-Demand Learning

Flexible, self-paced learning options



Professional Learning Communities (PLCs)

Collaborative sessions for continuous improvement

On-Demand Professional Learning

The Great Minds digital platform features a comprehensive Knowledge Hub with access to robust pedagogical tools. With more than 150 videos designed to support teachers, educators can access on-demand support through the following:

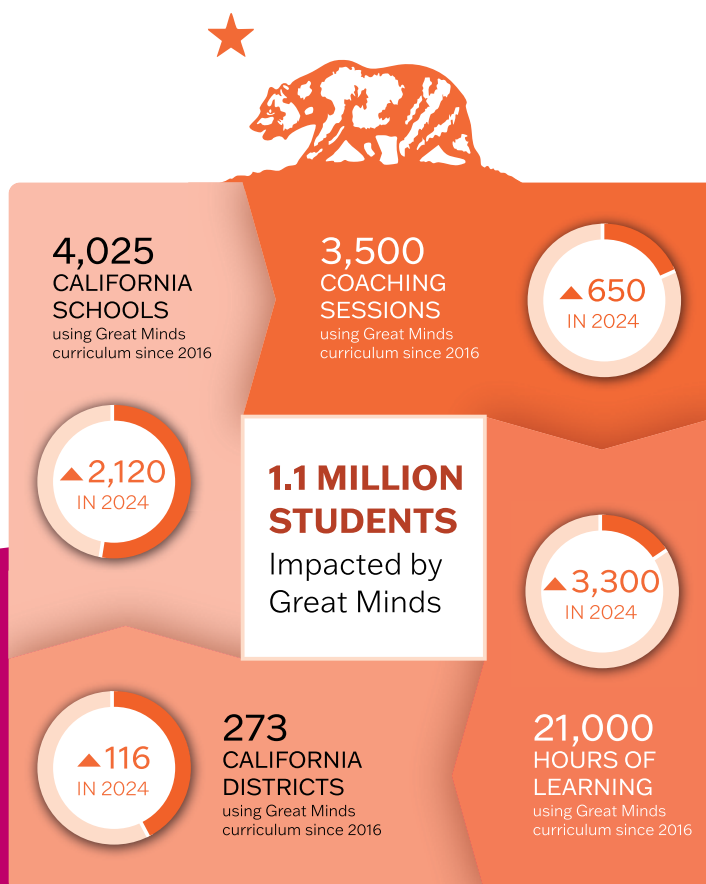
- **Implementation videos and guides** that walks through a successful program rollout
- **Coherence videos** that highlight connections across models, topics, and grade levels
- **How-to videos** that model effective lesson execution
- **Routine videos** that demonstrate high-leverage instructional practices
- **Culturally Responsive Teaching videos** that provides guidance to create an equitable learning environment

Great Minds provides feedback-rich, curriculum-aligned support that grows with your team over time. Every experience builds confidence, deepens expertise, and drives sustainable success across classrooms, schools, and districts.



IMPACT INTEL

! Great Minds has impacted nearly 2.7 million students.



Inside *Eureka Math*² California Components

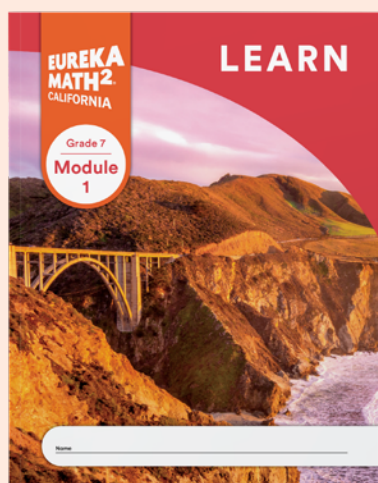


Teach

TEACHER EDITION

The *Teach* book empowers teachers with the tools and guided instruction they need to meet every student's learning needs.

- 6 *Teach* books (1 book per module)
- A lesson design that uses the following progression: Fluency-Launch-Learn-Land
- Universal Design for Learning supports

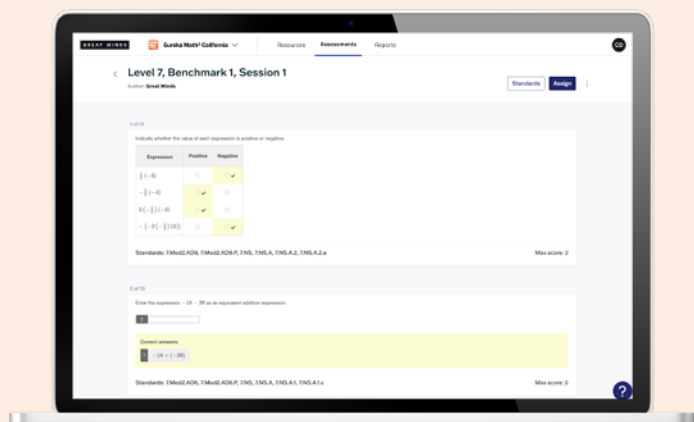


Learn

STUDENT EDITION

The student *Learn* book correlates seamlessly with the structure of each lesson.

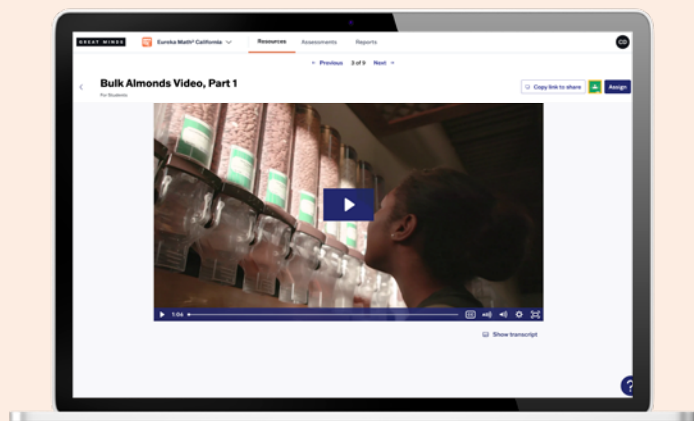
- Classwork lesson pages
- Practice problems and Recap pages
- Exit Tickets with Self-Reflection



Teacher Digital

Teachers can leverage digital platform tools to support teachability and foster student engagement.

- Lesson presentation slides
- Module, topic, and lesson resources
- Digital interactives
- Data and Differentiation
 - *Eureka Math² Equip*
 - *Math Catalyst*
 - Benchmark Assessment
- Digital assessments and reporting
- Data Talks and Data Investigations
- Implementation and context videos
- Professional development videos



Student Digital

Students can digitally access assessments and resources that support their independent learning.

- Module, topic, and lesson resources
- Assigned Topic Quizzes
- Lesson videos
- Practice problems
- Assigned Pre-Module Assessments
- Assigned Module Assessments



Manipulative Kits

The collection of manipulatives supports students as they visualize concepts, test ideas, and deepen their mathematical reasoning.

- Grade-level kits
- Online virtual manipulatives

Designed for Deeper Thinking— Built for Greater Growth

Eureka Math² California is committed to the belief that every student is capable of greatness. When instruction is coherent, engaging, and intentionally designed, students develop confidence in their mathematical understanding.

Eureka Math² California brings this to life through



coherence

that builds readiness
for high school,



cognitive engagement

that builds rich
understanding, and



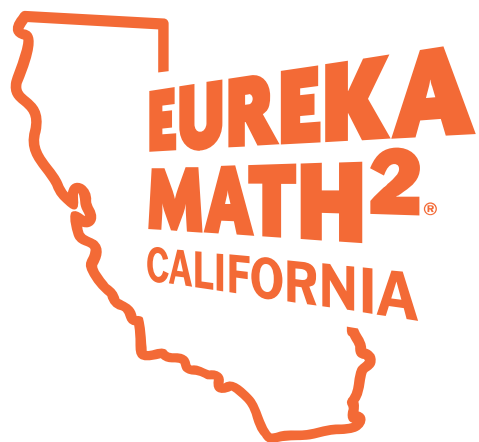
confident learning

that helps every
student thrive.





■ Get ready to create the “aha!” moments that lead to greater growth.



To learn more visit
greatminds.org/math/eurekamathsquared/california

