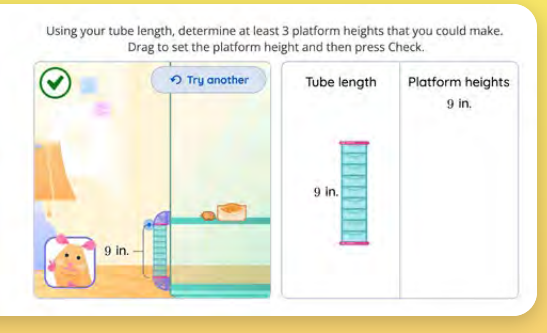
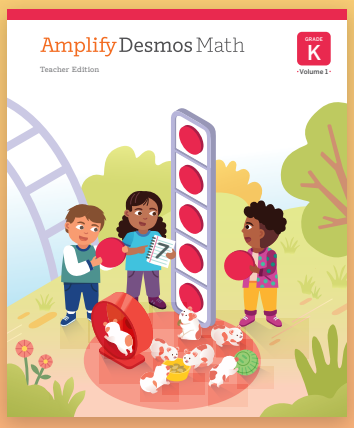
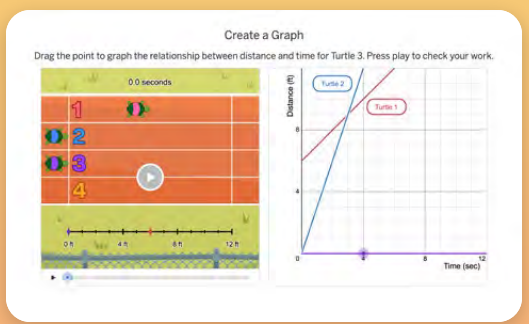
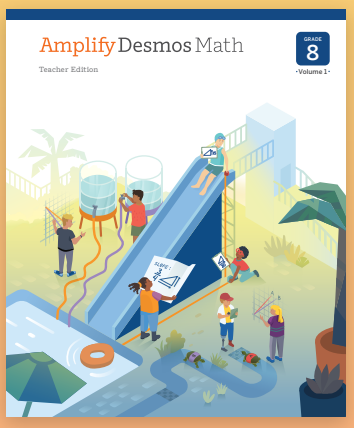
Program overview



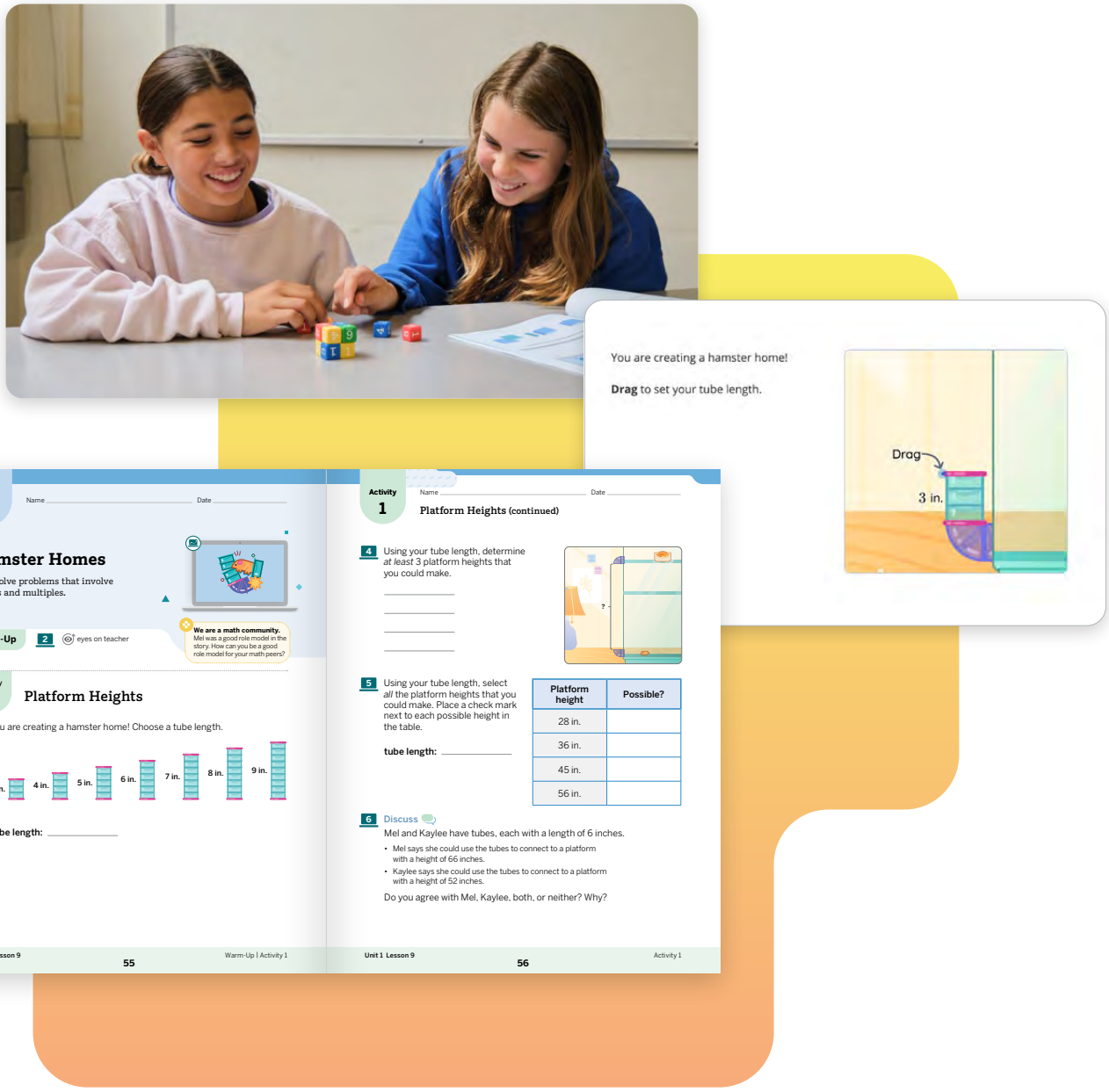






A curiosity-driven program that builds students' lifelong math proficiency

With students at its center, Amplify Desmos Math pairs problems students are eager to solve with clear, step-by-step instructional moves so teachers can build on students' curiosity to develop lasting grade-level understandings.



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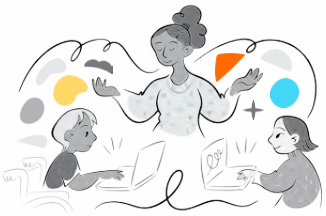
A powerful suite of math resources

SCREENING AND PROGRESS MONITORING

mCLASS Assessments



Measure what students know and how they think.

CORE INSTRUCTION

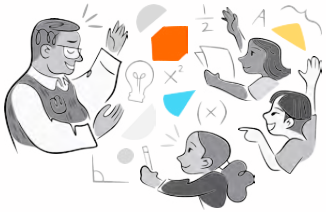
Amplify Desmos Math

Develop lasting grade-level understanding.

DIFFERENTIATION AND INTERVENTION

Targeted Teaching Tools

Boost Personalized Learning



Small group instruction, skill practice, and extension activities

Screening and progress monitoring

mCLASS® Assessments, along with daily formative checks, measure what students know and how they think. The asset-based assessment system provides teachers with targeted, actionable insights, linked to core instruction and intervention resources.

Core instruction

Amplify Desmos Math lessons provide a structured approach to problem-based learning, helping teachers create a collaborative math community with students at its center. Each lesson systematically builds on students' curiosity to develop lasting grade-level understandings for all students.

Differentiation and intervention

Boost™ Personalized Learning activities help students access grade-level math through engaging, independent digital practice. Responsive Feedback™ adjusts to students' work, providing item-level adaptivity to further support their learning.

Integrated resources like Mini-Lessons, Fluency Practice, and Math Adventures provide targeted intervention on a specific concept or skill connected to daily instruction. Extensions are also available to stretch students' understanding.

Math that motivates

Picture a classroom where students are so eagerly engaged in a lesson, they wish it wouldn't end. The room is buzzing with the sounds of natural curiosity. This is what an Amplify Desmos Math classroom looks and sounds like. This is math that motivates.

Collaborative experiences and meaningful conversations

Our student-centered approach ensures learning mathematics isn't done in isolation. Amplify Desmos Math fosters classroom communities where students make sense of mathematics by sharing their thinking in pairs or small groups, or with the whole class. These conversations allow students to connect and share their experiences, strengths, and knowledge, as well as their early thinking.

Interesting problems students are eager to solve

By tapping into students' natural inquisitiveness, engaging lesson activities motivate them to solve problems within familiar and appealing contexts, making math accessible and exciting for everyone.

Responsive Feedback

Responsive Feedback™ responds to student thinking by showing the mathematical meaning behind it, sparking their reasoning and questioning. The playful nature of this immediate feedback motivates and engages students, allowing them to explore their mathematical thinking without embarrassment, and discover why certain answers are incorrect or correct.

Unit Stories (grades K–5)

Unit Stories are brief fiction stories read aloud by the teacher at the beginning of each unit that connect to the math of the unit and introduce characters that students will get to know as they engage in the unit. In just a few minutes, students get to know the characters, setting, and plot of the story, all of which they will encounter again across the unit.

A structured approach to problem-based learning

Problem-based learning asks students to make sense of and think strategically about mathematically interesting problems. This approach allows students' ideas to take center stage, so they are active and engaged in their learning process. Teachers are able to hear and respond to student thinking in real time, guiding and differentiating instruction right in the moment.

Moving from "I do, We do, You do" to "You do, We do, I do"

Lessons begin by activating student's prior knowledge and curiosity, inviting them to explore the math, collaborate, and refine their thinking. By focusing on developing student thinking first, teachers can better connect ideas, guide learning, and synthesize learning objectives.

Proficiency Progression

A model that steps out problem-based learning

1. Activate students' prior knowledge and curiosity.
2. Generate new ideas through collaboration.
3. Refine ideas using facilitation tools.
4. Guide to grade-level understanding.
5. Practice, reinforce, remediate, and extend for lasting understanding.

An approach that supports teachers

Clear, step-by-step instructional moves help teachers plan and teach student-centered lessons that use student thinking to differentiate instruction and guide to grade-level understanding. They include:

- Guidance on what to listen for and how to respond.
- Clear learning objectives to keep learning on track for each activity and lesson.
- Daily reinforcement activities to provide direct instruction when needed.

Lessons that are rigorous—and delightful

Every lesson in Amplify Desmos Math is designed to put students at the center of their learning. Utilizing research-based best practices, students engage in meaningful work based on rich problems and real-world experiences. **Every lesson follows this structure:**

1 Warm-Up

Lessons begin by inviting every student to contribute to the mathematical discussion. Instructional routines are often used to build fluency, set the context, activate prior knowledge, or highlight a strategy that may be helpful in the lesson.

2 Rich learning activities

Math knowledge is built through experiences and meaningful interactions. Students notice, wonder, explore, calculate, predict, measure, explain their thinking, use math to settle disputes, create challenges for their classmates, and more. Teachers serve as a guide, using a Launch, Monitory, Connect framework:

- **Launch:** Teachers offer a short introduction to the problem or challenge.
- **Monitor:** As students work individually, in pairs, or in groups, teachers ask questions and provide support to move student thinking closer to the intended math goal.
- **Connect:** Teachers connect student ideas to the Key Takeaway of the activity to help students synthesize and solidify the big ideas.

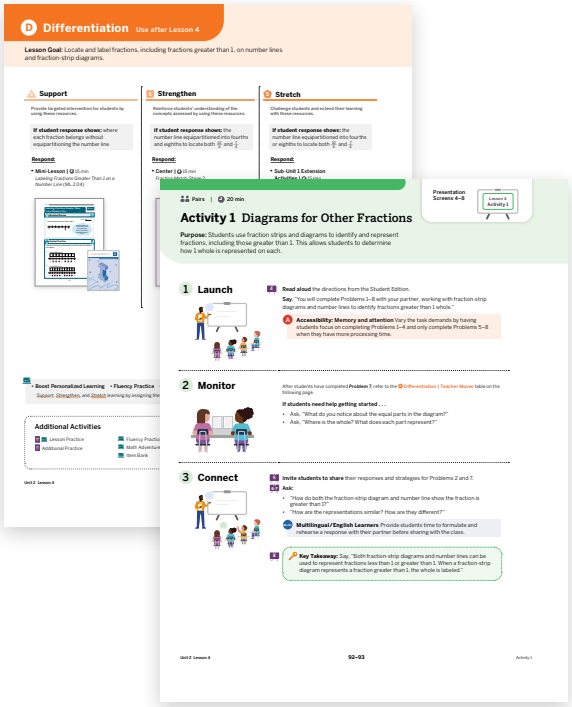
3 Synthesis

Teachers ensure that students end the lesson with accurate and enduring understandings of the math goal through synthesis of student ideas, explicit instruction, and reflection.

A short Show What You Know assessment allows students to show what they know about the learning goals of the lesson and reveal what they are still learning.

4 Differentiation and practice

Lasting understanding requires reinforcement. Every lesson offers Lesson Practice instructional recommendations to Support, Strengthen, and Stretch learning.



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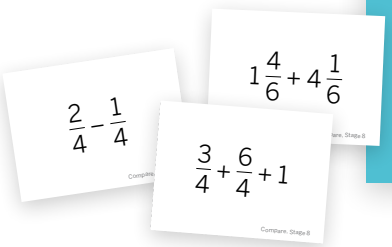
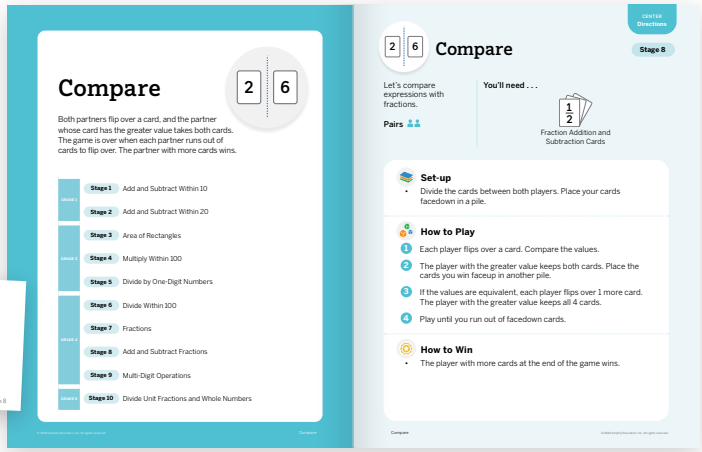
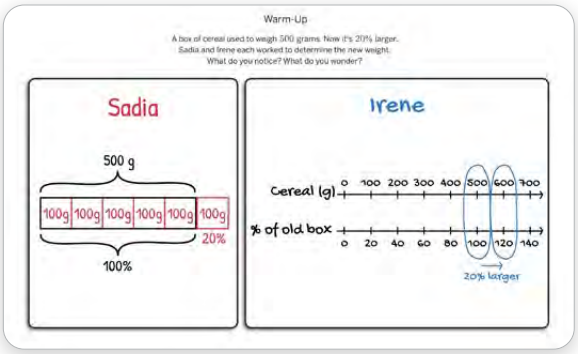
Instructional supports that deepen understanding

Centers (K–5)

Students play hands-on games collaboratively to strengthen their understanding of key skills and concepts. Centers are built into daily instruction at grades K–1 and as differentiation options for grades 2–5. Centers kits are available for easy grab-and-go use.







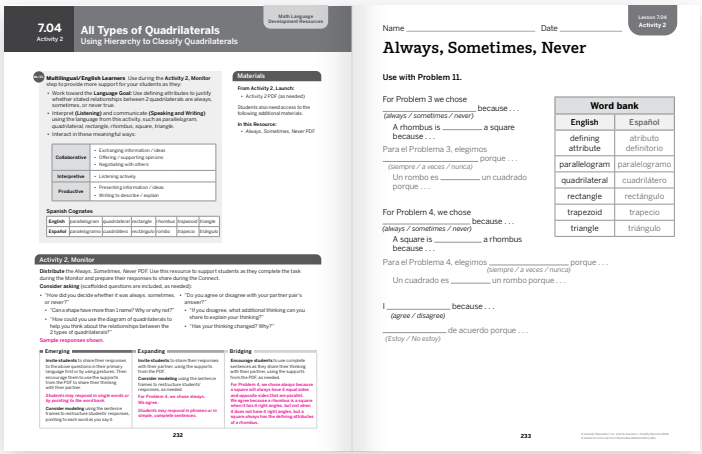
Instructional routines

Establishing consistency in the classroom frees up time and attention to focus on teaching and learning. Instructional routines such as Notice and Wonder and Number Talk are used to build fluency and number sense.

Vocabulary and language development

Every lesson includes opportunities for all students to develop and use mathematical language.

- New and review vocabulary
- Math Language Routines
- Multilingual/English learners support
- Accessibility support
- Language goals



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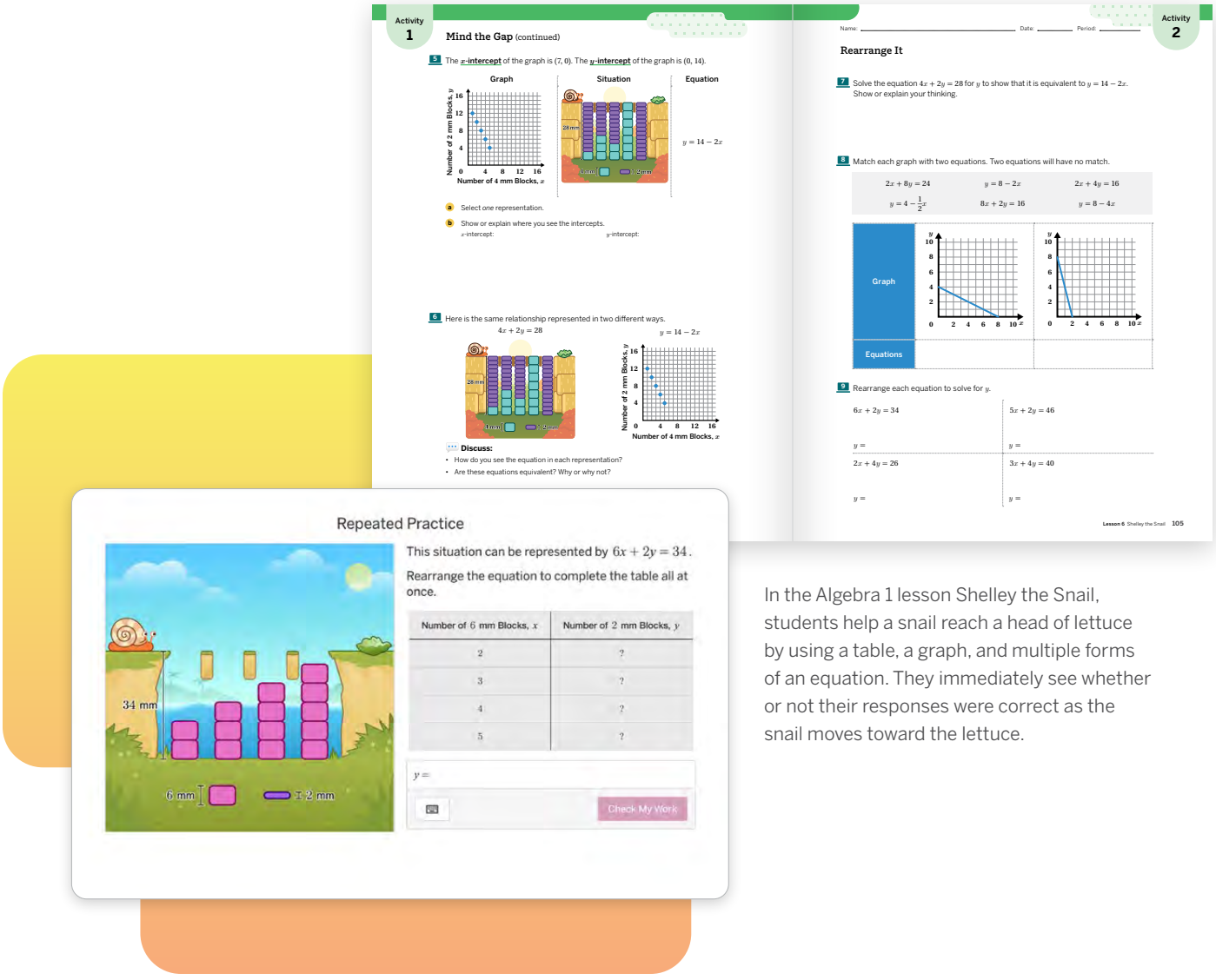
Print for every lesson with engaging digital experiences

The program thoughtfully combines conceptual understanding, procedural fluency, and application, motivating students with interesting problems they are eager to solve.

Whether in print or digital form, engaging interactions enable students and teachers to openly exchange ideas.

Each lesson includes student print materials, interactive teacher Presentation Screens, and digital resources for practice and differentiation. Some lessons also use manipulatives or provide options for students to use devices individually or in pairs. Device recommendations for student use are age-appropriate, with more frequent usage in middle and high school.



In the Algebra 1 lesson Shelley the Snail, students help a snail reach a head of lettuce by using a table, a graph, and multiple forms of an equation. They immediately see whether or not their responses were correct as the snail moves toward the lettuce.

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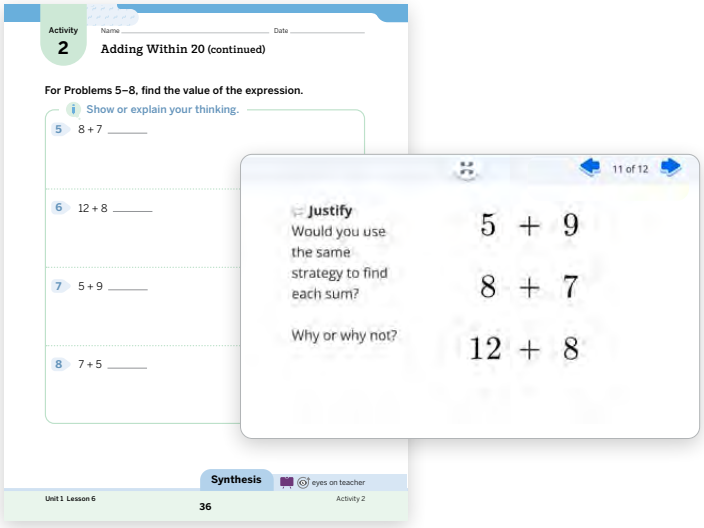
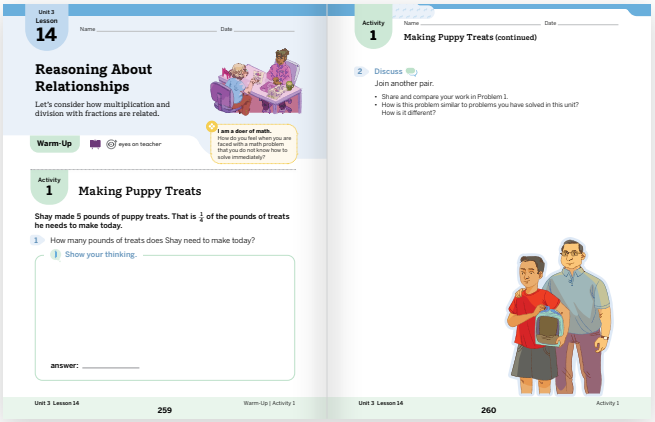
Developing problem-solvers who persevere

Multiple ways to solve a problem

There are often multiple ways of solving a problem. By hearing a variety of strategies, students see that their ideas are valuable and feel empowered to participate.



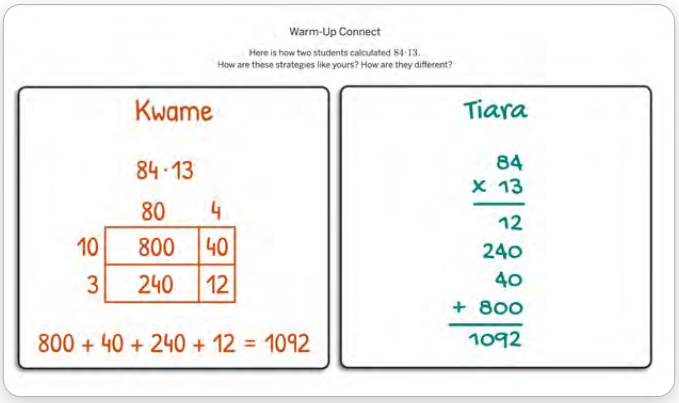


Productive struggle

When given time to reach into their strategy toolboxes and play out their thinking, students can persevere in making sense of problems and getting to a correct answer.

Flexible, confident problem solvers

Computational fluency helps students tackle challenges with ease and adaptability. Our curriculum weaves fluency into everyday learning with plenty of practice opportunities. Students become versatile problem solvers ready to apply their skills in any situation.



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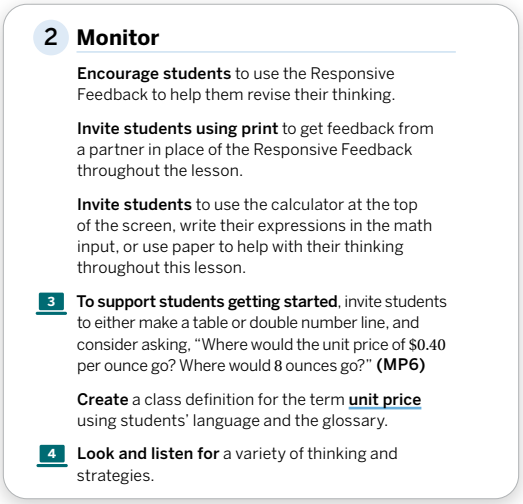
Access to grade-level math for every student, every day

The Amplify Desmos Math curriculum provides teachers with lessons, strategies, and resources to eliminate barriers and increase access to grade-level content without reducing the mathematical demand of tasks. Our lessons are developed using the Universal Design for Learning (UDL) framework to proactively ensure that all students can access and participate in meaningful, challenging learning opportunities.



2 Monitor

Encourage students to use the Responsive Feedback to help them revise their thinking.

Invite students using print to get feedback from a partner in place of the Responsive Feedback throughout the lesson.

Invite students to use the calculator at the top of the screen, write their expressions in the math input, or use paper to help with their thinking throughout this lesson.

3 **To support students getting started**, invite students to either make a table or double number line, and consider asking, "Where would the unit price of $0.40 per ounce go? Where would 8 ounces go?" **(MP6)**

Create a class definition for the term **unit price** using students' language and the glossary.

4 **Look and listen for** a variety of thinking and strategies.

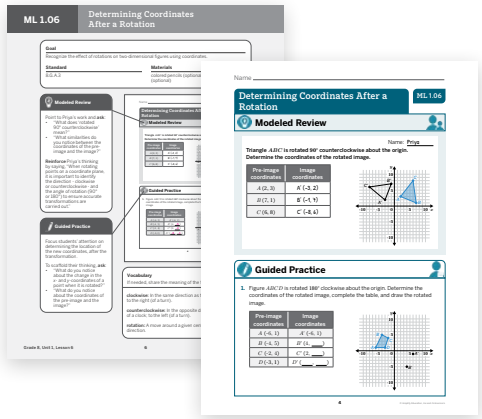
Teacher Supports

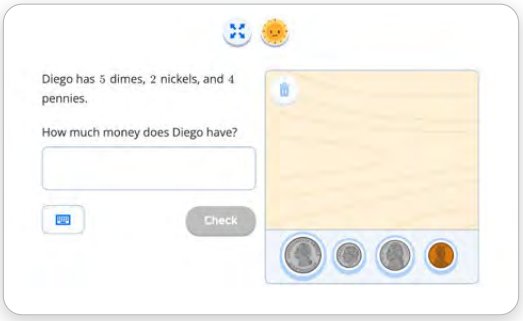
Embedded, in-the-moment professional development is included in the unit- and lesson-level. These moments of learning provide teachers with key instructions, models, strategies, and guidance.

Teachers receive guidance on how to identify students at different levels of understanding—those who need extra support, those strengthening their skills, and those ready to stretch their learning—as well as resources to use with each group.

Mini-Lessons

Mini-Lessons are 15-minute lessons aligned to the most critical topics throughout a unit. Through Modeled Review and Guided Practice, teachers can provide targeted intervention to small groups of students who need additional support or to re-engage students with content they may need more time on.





Boost Personalized Learning (grades K–8)

Boost Personalized Learning activities target a skill or concept aligned to the core lesson, providing another layer of support to daily learning. Instruction adjusts within each activity based on what each learner already knows. Personalized scaffolds include:

- Responsive Feedback
- Guided instruction
- Intervention support

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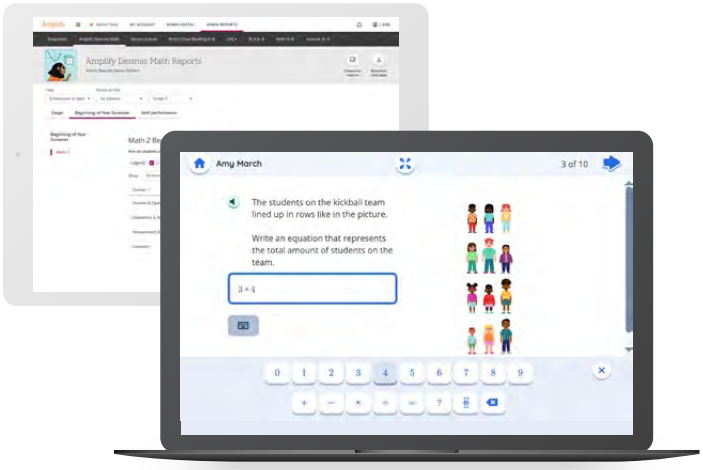
Student thinking is valuable and can be made evident.

By starting with what students already know, Amplify Desmos Math helps build a strong foundation for success to guide and support future learning. With explicit guidance on what to look for and how to respond, teachers can effectively support students as they develop their understanding.



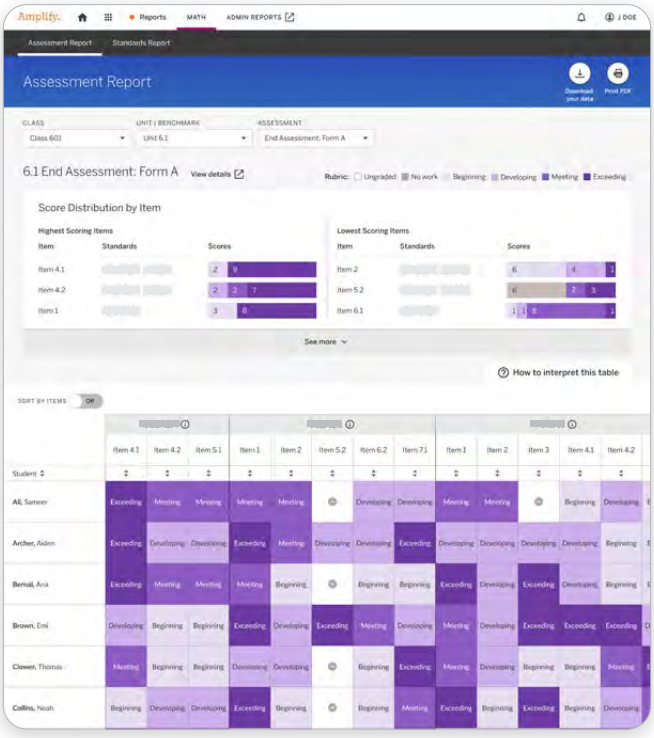
mCLASS Assessments

Benchmark and progress monitoring assessments identify what students know and can do. Integrated mCLASS Assessments reveal students' math thinking through an asset-based approach. This data provides better insights about what students know, what math assets to leverage, and where students need support.

Data and reporting

Reporting tools monitor progress and provide insight into learning. Amplify Desmos Math provides teachers and administrators with unified reporting and insights so that educators have visibility into what students know about grade-level math—and can plan instruction accordingly for the whole class, small groups, and individual students.

Reporting functionality integrates unit assessments, lesson assessments, personalized learning, benchmark assessments, and progress monitoring for a comprehensive look at student learning.



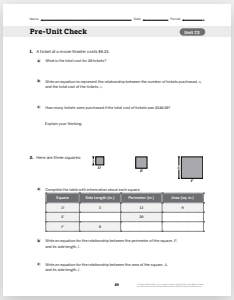
At-a-glance views of assessment results inform instructional planning.

Assessment

A variety of performance data in Amplify Desmos Math provides evidence of student learning, while helping students bolster their skills and understanding.

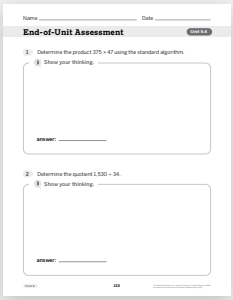
Unit-level assessments

Our embedded unit assessments offer key insights into students' conceptual understanding of math. These assessments provide regular, actionable information about how students are thinking about and processing math, with both auto-scoring and in-depth rubrics that help teachers anticipate and respond to students' learning needs.


Pre-Unit Check

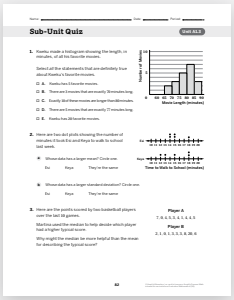
Pre-Unit Check (grades 1–A1)

Each unit begins with an assessment designed to identify the student skills that will be relevant to the upcoming unit. This check is agnostic to the standards covered in the following unit and serves not as a deficit-based acknowledgment of what students do not know, but rather as an affirmation of the knowledge and skills with which students come in.


End-of-Unit Assessment

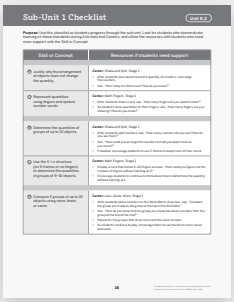
End-of-Unit Assessment

Students engage with rigorous grade-level mathematics through a variety of formats and tasks in the End-of-Unit Assessment. A combination of autoscored and rubric-scored items provide deep insights into student thinking. All Amplify Desmos Math End-of-Unit Assessments include two forms.


Sub-Unit Quiz

Sub-Unit Quizzes

With regular Sub-Unit Quizzes, student understanding never comes as an end-of-unit surprise. In these checks, students are assessed on a subset of conceptual understandings from the unit, with rubrics that help illuminate students' current understanding and provide guidance for responding to student thinking.


Sub-Unit 1 Checklist

Sub-Unit Checklists (grades K–1)

These checklists enable teachers to observe key skills and concepts that cannot be assessed on a pencil-and-paper assessment. The checklists outline the supports students need to get where they need to go.

Daily formative assessments

Amplify Desmos Math lessons are centered around sense-making and in-the-moment feedback. Daily moments of assessment provide valuable evidence of learning for both the teacher and student. Teachers are able to use these assessments to differentiate for students using resources such as Mini-Lessons and Boost Personalized Learning.

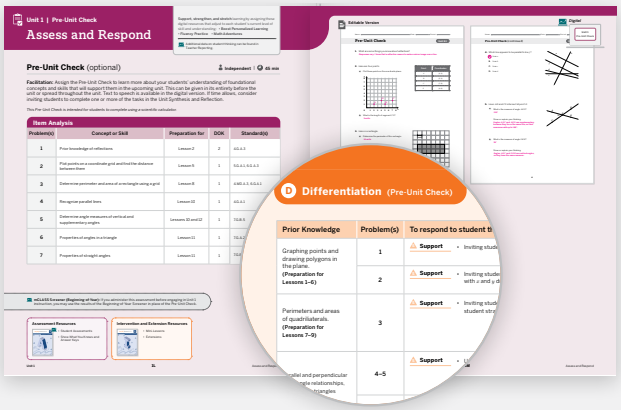
Show What You Know

Each lesson has a daily formative assessment focused on one of the key concepts in the lesson. Show What You Know moments are carefully designed to minimize completion time for students while maximizing daily teacher insights to attend to student needs during the following class. (*Show What You Know is optional in grades K–1.*)

Beginning in grade 2, all unit-level and lesson-level assessments can be completed digitally.

Assess and Respond

For each assessment item, teachers are provided with clear suggestions on how to respond to student thinking. Instructional resources and teacher moves are recommended for students who need additional support.



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Differentiation and Intervention

Differentiation is organized into three categories:

Support

Provide targeted intervention for students by using these resources.

Strengthen

Reinforce students' understanding of the concepts assessed by using these resources.

Stretch

Challenge students and extend their learning with these resources.

In-lesson Teacher Moves

Within every lesson activity, teachers can use the Differentiation Teacher Moves suggestions to provide in-the-moment instructional support to learners while they are engaged in the work of the lesson/task.

Teachers are provided with clear student actions and understanding to look for, each matched with immediately usable suggestions for how to respond to the student thinking illustrated in each row of the table.

Differentiation

Look for students who:	Respond to Student Thinking
Need support getting started.	**Support** Consider asking, "Where else have you heard the words rotation and reflection before?" In this context, the word translation may be new to students and therefore more challenging.
Are unsure about where to place "flip" because flipping can sometimes be turning.	**Strengthen** Consider sharing that this definition of flip is to flip over, like a pancake.
Sort the cards correctly.	**Stretch** Invite students to write three other words that describe these new terms.

Differentiation beyond the lesson

The learning goal of each lesson is broken down for teachers into what it looks like for students who need support in the lesson goal, for students who need to keep strengthening their understanding of the lesson goal, and for students who are ready to stretch their learning.

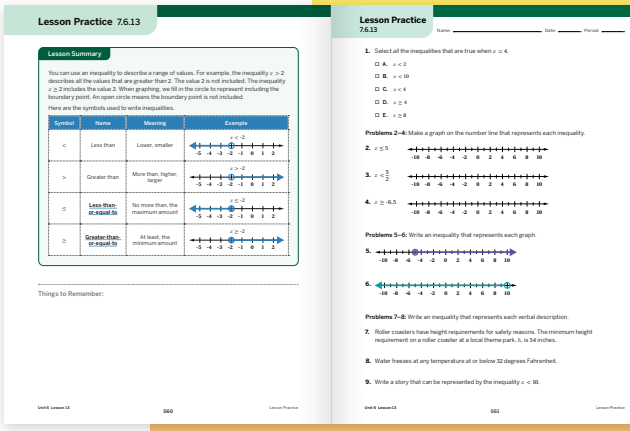
Teachers are provided with recommendations for resources to use with each group of students at the end of each lesson.

Practice makes progress.

When it comes to cementing new learning into long-term understanding, ample practice opportunities are key. Amplify Desmos Math builds practice and fluency opportunities into both daily instruction and independent practice.

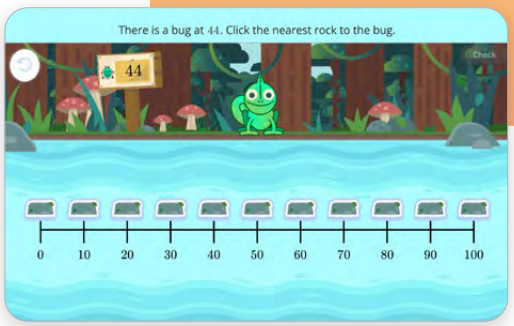
Lesson practice

Every lesson includes lesson practice in both print and digital* intended to support fluency work and spiral review. Additionally, some activities include repeated practice challenges and Challenge Creators to provide additional opportunities for in-lesson practice.



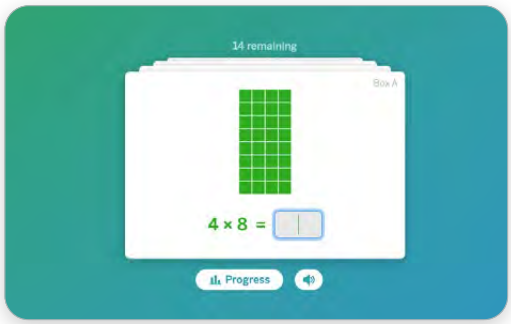
Boost Personalized Learning (grades K–8)

This independent, digital practice provides access to key concepts of the day's lesson through Responsive Feedback that adjusts to student thinking.



Fluency Practice (grades K–8)

Fact Fluency uses spaced repetition, an evidence-based approach to promoting memory retention, to teach basic facts.



Additional Practice

Available as blackline masters for teachers or as student workbooks, Additional Practice provides two pages of additional problems per lesson.

Math Adventures

These strategy-based digital math games give students a fun, engaging, and low-stakes way of practicing math skills. Math Adventures are perfect for times when teachers need students to be independent after finishing classwork, an assessment, or group work.

Item Banks

Teachers can create practice sets, digital screens, or assessments from scratch from a bank of items that are appropriately tagged by standard.

*Practice problems in grades K–1 are only available in print.

Empowering educators: Support for every step of your journey

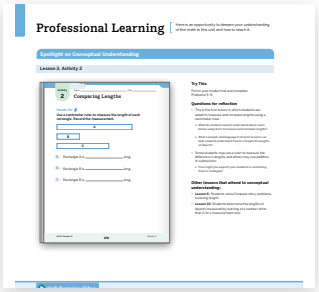
When educators grow, students grow. With embedded unit- and lesson-level support and a talented team of experts, we support educators' professional growth, whether they are implementing a new approach or enhancing existing instructional practices.

From live, in-person training and coaching to online courses and virtual professional development, we offer a range of support to fit districts' needs and educators' busy schedules.

Customer Success team

A dedicated team is ready to answer your questions and ensure you have everything needed for a smooth and successful implementation.

Embedded professional learning



Each unit includes an opportunity for teachers to put on their "student hat" and try out some math from the unit. Videos and guidance help teachers deepen their understanding of the math and feel prepared to teach it.

Training workshops

Amplify offers Launch sessions, Strengthen sessions, and Coaching sessions to support both teachers and administrators throughout their entire implementation journey.

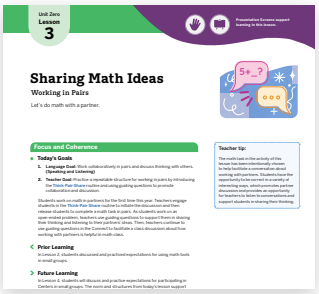
Professional Development Library

This centralized location allows educators to access an ever-growing collection of videos, resources, and courses that support the implementation of Amplify Desmos Math.

Customizable resources

The Amplify Classroom platform allows teachers to edit and customize lesson resources—including printable resources—to fit the needs of their classroom.

Unit Zero (grades K–5)



Get teachers and students familiar with the routines and structure of Amplify Desmos Math. Unit Zero is a set of five optional lessons and resources designed to support the first five days before Unit 1.

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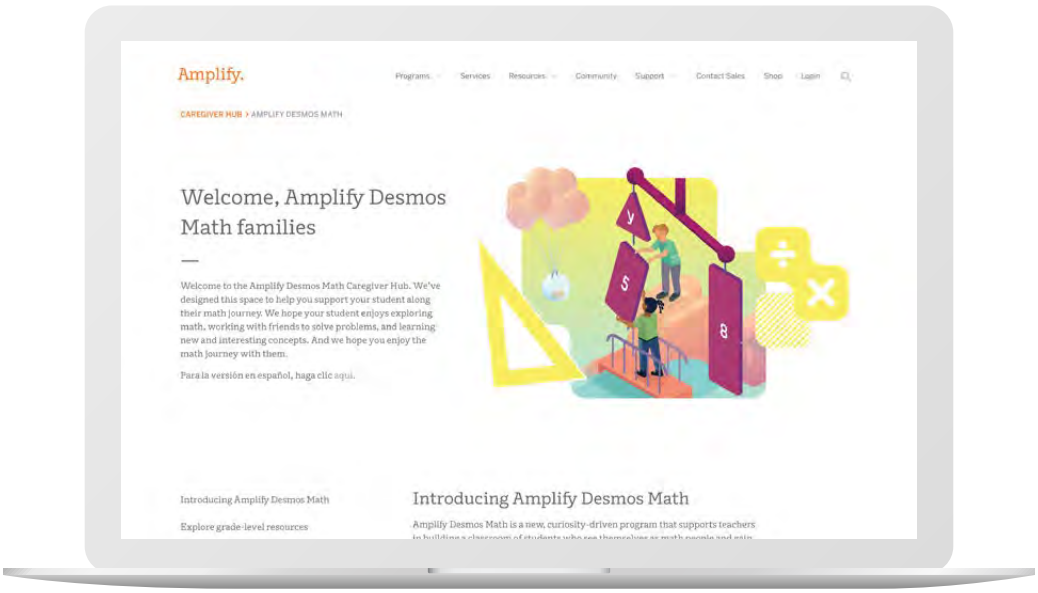
Connecting caregivers to the classroom

Partnering with caregivers and the larger community is critical to supporting children in the classroom.

Amplify Desmos Math Caregiver Hub

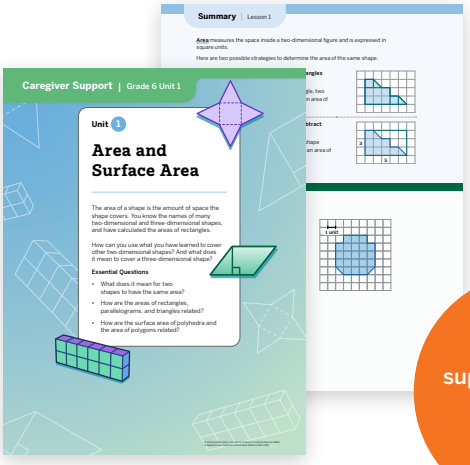
An easy-to-access website with resources specialized for each grade, the Caregiver Hub provides access to information about key concepts being taught and opportunities for practice and reinforcement, enabling caregivers to provide at-home support to their learner.



Ready-to-share caregiver support

Teachers can easily keep caregivers in the loop throughout the year, whether introducing the program, sharing about the upcoming unit, or helping a specific student. These resources include the following:

- Beginning-of-Year Caregiver Letter
- Caregiver Unit Overview featuring the math of the unit and Try This problems
- Refresh Videos walk students and caregivers through a review of important concepts.



Caregiver supports are also available in Spanish!

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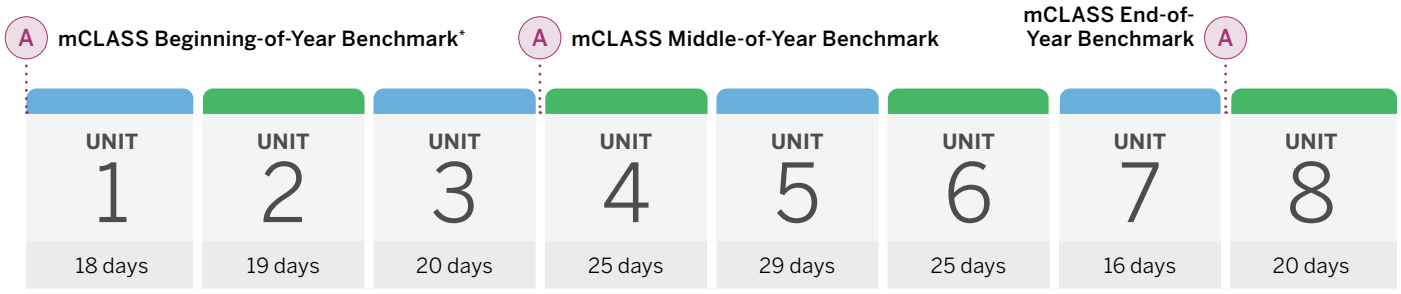
Program architecture

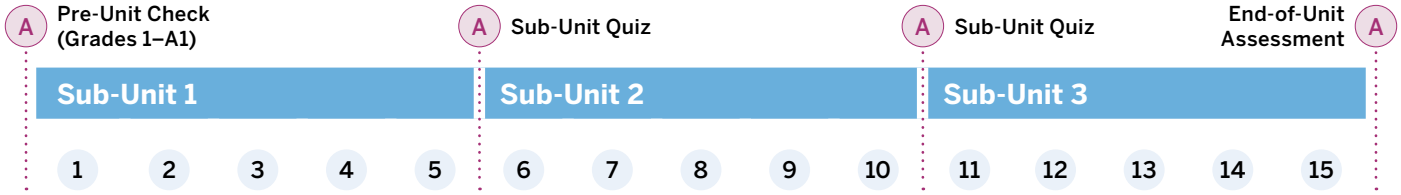
Course



Note: The number of lessons varies from unit to unit in each grade.

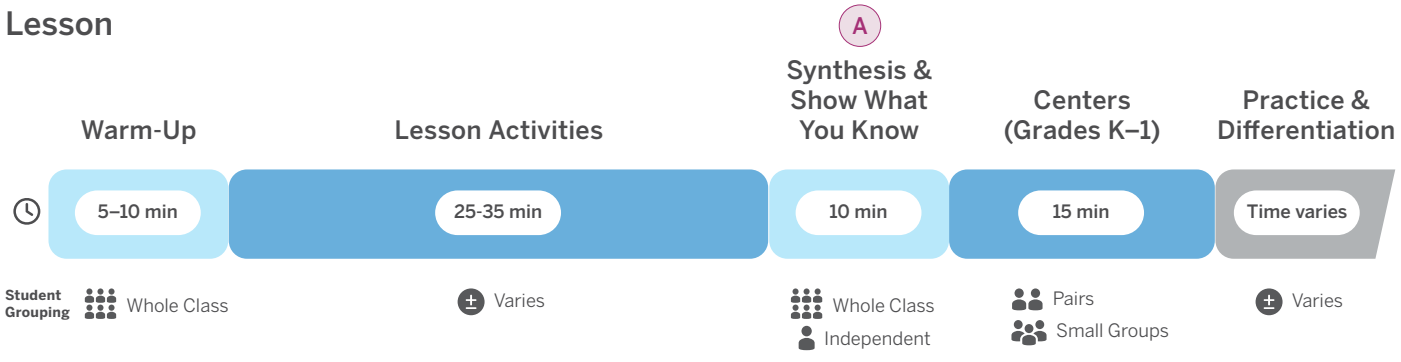
*mCLASS Benchmarks are available for grades K–8. A brief, but powerful mCLASS Beginning-of-Year Screener for grades K–8 is provided when mCLASS Benchmark is not included.

Unit



Note: The number of sub-units per unit and lessons within each sub-unit varies. This depiction shows the general structure of a unit. In grades 6–A1, a Practice Day precedes each assessment day.

Lesson



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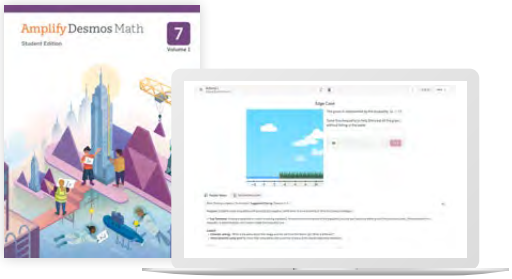
Program components



For students

- **Student Edition** (two volume): Print student consumable workbook
- **Digital access** to lesson resources and practice, including:
  - Interactive Student Activity Screens
  - Responsive Feedback™
  - Collaboration tools
  - Boost Personalized Learning (grades K–8)
- **Additional Practice:** Take-home workbook with two pages of practice problems per lesson, aligned with Amplify Desmos Math Student Edition

Student materials are also available in Spanish.

Manipulative Kits and Centers Kits

Manipulative kits are specific to each grades K–5. Grades 6–A1 share a common manipulative kit. Centers kits are available for easy grab-and-go use that include all printed materials needed, organized and pre- packaged by Center and Center stage.

For teachers

- **Teacher Edition** (two-volume*): Print teacher resource guiding lesson differentiation and instruction
- **Digital access** to planning and instruction resources, including:
  - Presentation Screens
  - Facilitation and progress monitoring tools
  - Assessment and reporting suite, including mCLASS® Assessments (grades K–8)
- **Additional Practice:** Following Amplify Desmos Math structure, these offer two pages of practice problems per lesson with answers for teachers.
- **Assessment and Lesson Resources:** Robust assessments drive learning and inform instruction.
- **Centers Resources** (grades K–5): Centers Resources appear as part of instructional activities and lesson differentiation, and include work mats, instructional cards, guidance, and other print materials.
- **Intervention and Extension Resources**: Additional resources reinforce and extend key concepts, including Mini-Lessons and Extensions.
- **Math Language Development Resources:** Provides teachers with strategies, including vocabulary routines and activity pages, to enhance English learners' language skills and understanding in math classes.

** Grades K–2 have four volumes.*

Visit us online to learn more about Amplify Desmos Math.

amplify.com/math

Amplify.

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