CARNEGIE LEARNING

Program Overview

Georgia
Middle and High School Math Solutions

First Edition

Core Mathematics for Grades 6–12

Created for Georgia

- Grounded in the Georgia Mathematics Standards and Georgia Curriculum Maps
- Connected MATHbook lessons and MATHia® coaching bring collaborative and individual learning together
- Included MATHstream® adaptive, interactive videos support readiness, reinforcement, and re-engagement
- Integrates the Mathematical Practices throughout instruction
- Embedded teacher guidance, differentiation strategies, and English Learner supports
- MATHia one-to-one software supports individual student learning and builds confidence
- Practice with technology-enhanced problem types that build familiarity with Georgia Milestones
- Connected planning, teaching, and learning resources in the Clear Learning Center

Build Math Thinkers

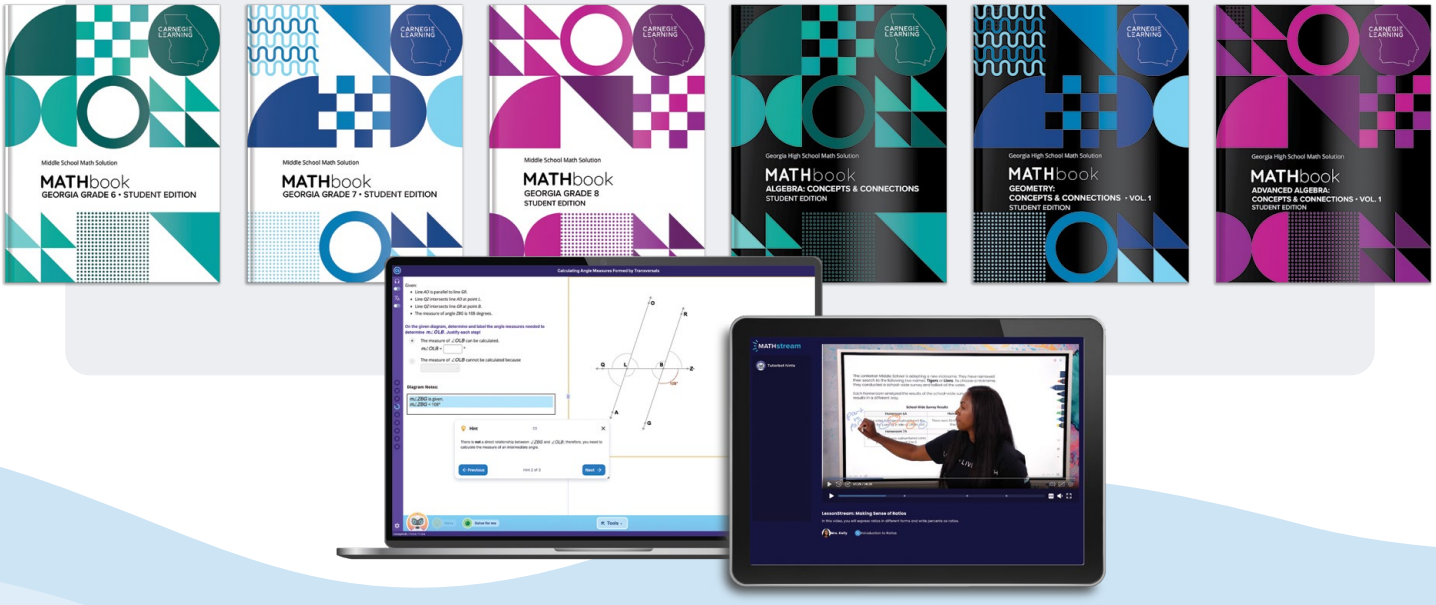
Our Georgia Middle and High School Math Solutions empower every learner to experience joy in math as they meet and surpass the Georgia Mathematics Standards and develop deep mathematical understanding. Teachers value student voice and facilitate the productive struggle students need to reach their fullest potential.

With a blend of collaborative tasks, digital tools, and real-world connections, students build the confidence and habits of mind they need to thrive in math and beyond. Teachers get real-time data and flexible tools to support every learner, every day.

What are our Georgia Middle and High School Math Solutions?

Our solutions are a comprehensive 6–12 core program that fully align to the Georgia Mathematics Standards. It transforms students into confident sense-makers, articulate communicators, and creative problem solvers.

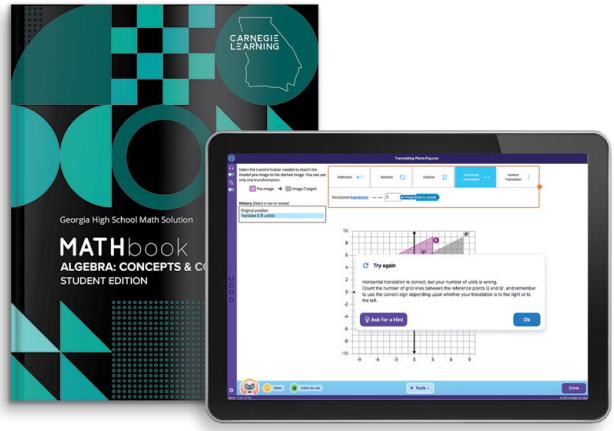
A complete suite of resources supports teachers every step of the way: implementation guides, interactive lesson materials, MATHstream's adaptive instructional videos, plus assessments and data insights. It's everything needed to meet every student where they are in their math journey.



Intentional Design for Intentional Instruction

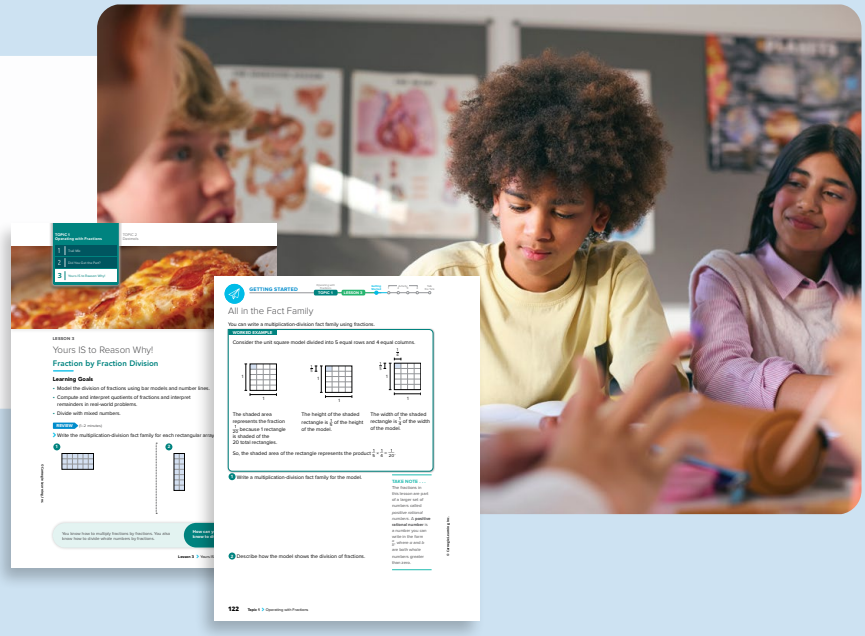
Get a seamless teaching and learning experience in one course. MATHbook and MATHia work together, giving teachers the confidence to handle all their planning and instructional needs, without the hassle of matching materials or piecing together a schedule that makes sense.

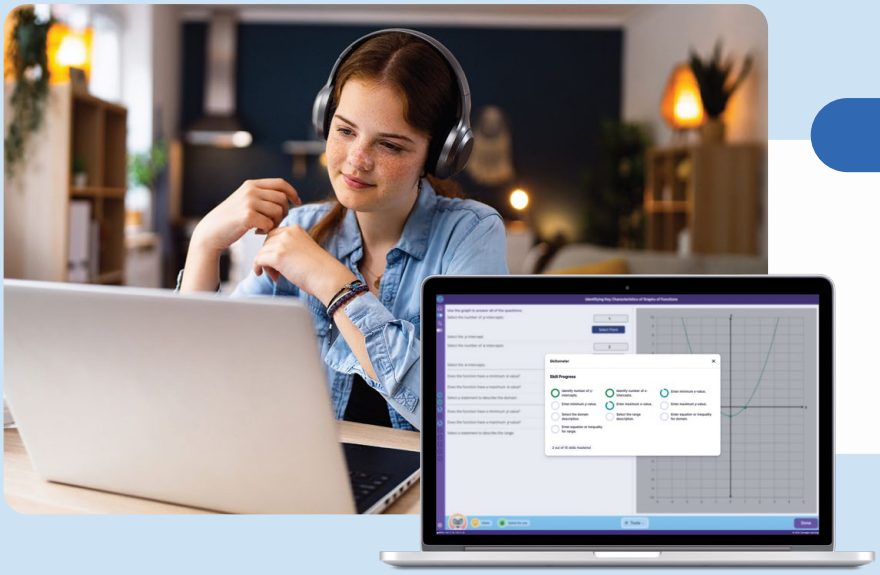
MATHbook and MATHia also give students the best of both worlds: time to talk through math together, and space to learn at their own pace.



Learning Together Days

Students develop confidence as math thinkers and communicators through collaborative, teacher-facilitated learning experiences with the interactive text, both in print and digital formats.





Learning Individually Days

When it's time to explore math independently, students work one-on-one with MATHia, getting real-time coaching that adjusts to exactly where they are.

Building Math Thinkers Through Productive Struggle

MATHbook and MATHia intentionally keep students challenged, but not overwhelmed. There, they build perseverance and flexible thinking, rather than just chasing the correct answer.

MATHbook's write-in format allows students to create their own knowledge as they engage in making mistakes and learning from them. Teachers facilitate and encourage students to collaborate with the questioning and discourse supports provided in the Teacher's Implementation Guide.

When students are ready to learn individually, MATHia's adaptive coaching platform delivers the exact number of problems students need to hone their skills, with just-in-time and on-demand hints that keep them in the sweet spot of productive struggle.

"One of my students felt he was never good in math. But through a lot of productive struggle, he learned how to write an equation from a word problem and in multiple representations. It was a small success in the scheme of the school year, but to him, it was like he had climbed Mt. Everest. When he was finished, he felt like he could solve any problem in the world."

Jane Dehaan, Teacher and Carnegie Learning Customer
Hickory Creek Middle School
Frankfurt, IL

Plan with Purpose. Teach with Clarity. Reach Every Learner.

Because you're the expert in your classroom, your curriculum should support your decisions, not override them.

What Students Experience

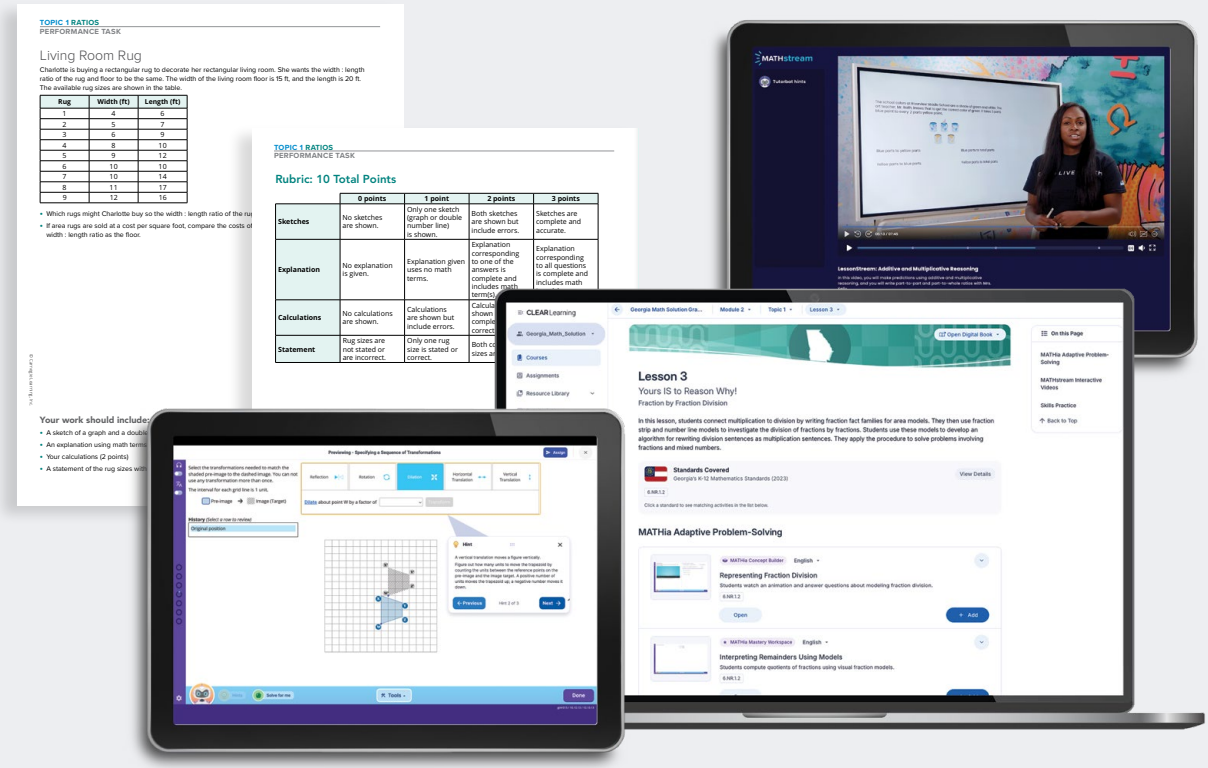
- Scaffolded tasks that promote reasoning
- Opportunities to collaborate and reflect
- One-to-one online coaching that adapts to individual student needs
- Adaptive, interactive instructional videos
- On-demand guidance that supports student agency
- Just-in-time hints that provide personalized intervention

How Teachers Are Supported

- Built-in Differentiation Strategies
- Common Misconceptions and Student Look-fors
- Questions to Support Discourse
- EL strategies to support English learners
- Ongoing informal assessment support

Tools That Work as Hard as Georgia Teachers Do

Our Georgia Middle and High School Math Solutions provide flexible, ready-to-use resources that make it easy to plan, teach, and adapt without sacrificing rigor or instructional time.

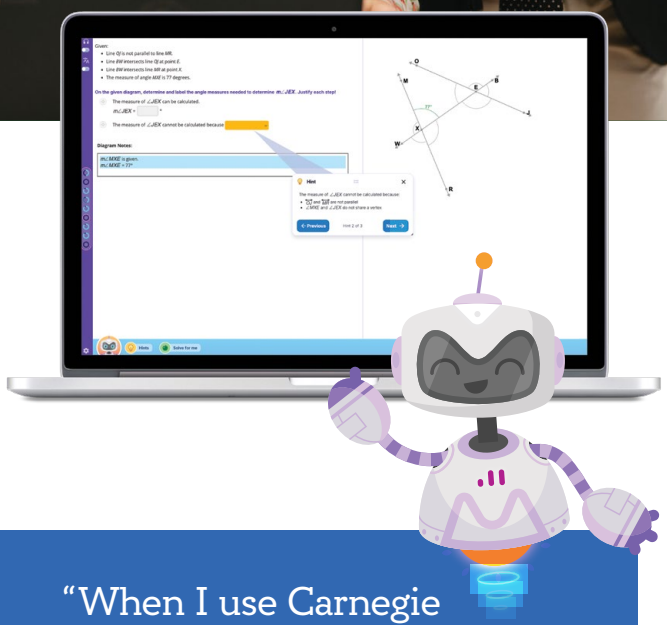


Your Teacher Toolkit Includes:

- ✔ **Teacher's Implementation Guide** for planning and point-of-use facilitation.
- ✔ **Module and Topic Overviews** to clarify how concepts build across the arc of math, from prior learning to what's next.
- ✔ **Lesson Resources** for step-by-step guidance to support facilitation and deepen understanding.
- ✔ **Questions to Support Discourse** and conversations that elicit evidence of student thinking and understanding.
- ✔ **Embedded Supports** including Differentiation, EL Strategies, Common Misconceptions, and Student Look-fors.
- ✔ **MATHia Reports and LiveLab** with real-time insights so teachers can focus on students who need the most support.
- ✔ **MATHstream** featuring adaptive, interactive instructional videos.
- ✔ **The Clear Learning Center** with access to resources for planning and implementation support.

MATHia: Smart Support. Real Results.

MATHia delivers personalized, just-in-time support for every student while giving teachers real-time data to drive instruction. It's like having a personal math coach who guides each learner toward understanding and Georgia Milestones success.



"When I use Carnegie Learning, I found that my students test scores rose exponentially because of the work that they were doing every day. They were able to tackle those real world problems and they were able to make sense of the mathematics. So I recommend Carnegie Learning for anyone out there looking for a new program."

Angela Leach, Teacher,
DeKalb County School Systems, GA

Personalized Learning That Supports Students' Every Move

MATHia goes beyond right or wrong answers. It uses adaptive software to analyze students' thinking, uncover misconceptions, and deliver real-time, targeted feedback that builds understanding and lasting skills.

Aligned to Georgia Mathematics Standards

MATHia magnifies the teachers' impact by giving each student their own math coach. By focusing on specific skills, MATHia helps students accelerate to grade level and beyond.

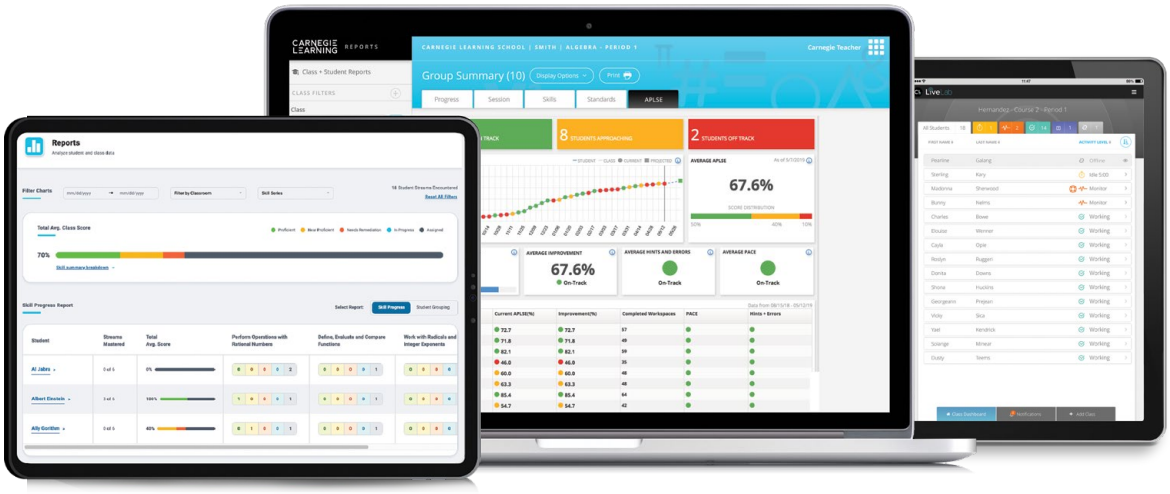
Built for Georgia Milestones

MATHia is a powerful tool that prepares students for end-of-grade and end-of-course tests. It offers routine practice with technology-enhanced problem types, including an equation editor, text entry, and tools like digital graphing and number lines.

Today's data drives tomorrow's success

Help create the next generation of math thinkers by knowing where your students are and never losing sight of where they're headed. Teachers get reliable insights into student learning with the comprehensive combination of MATHbook, MATHia, and MATHstream.

Get insights into students' current needs, plus predictive measures on their future performance on Georgia Milestones end-of-grade and end-of-course tests, with MATHia's LiveLab and APLSE report.



Standards and Skills Reports

Know what students have mastered.

Adaptive Personalized Learning Score (APLSE) Report

The APLSE Report focuses on the APLSE score, a prediction of student success. Consistent, regular practice in MATHia drives the most accurate APLSE score.

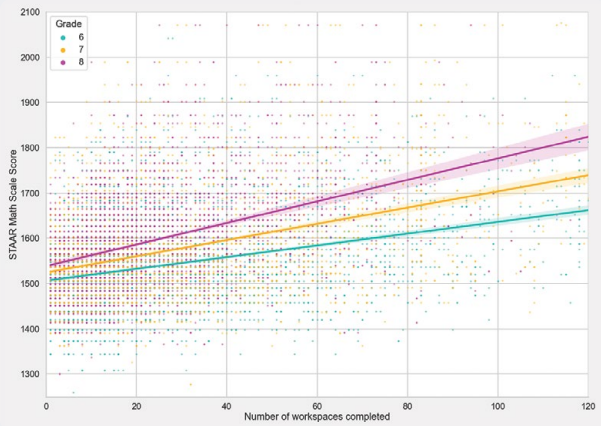
LiveLab

LiveLab provides real-time insights on days when students use MATHia so you can focus your attention on students who need it the most.

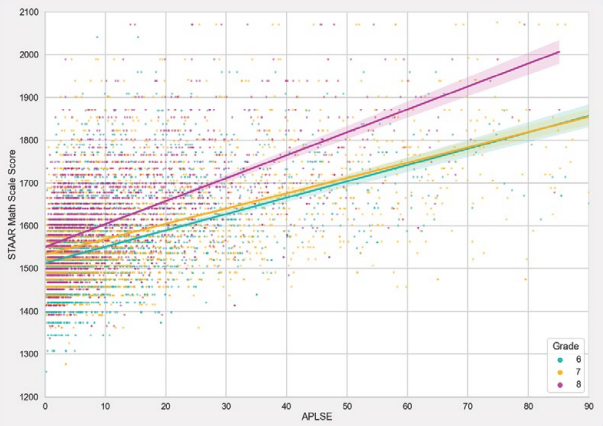
More MATHia = Better Outcomes

Data from 10,000 middle school students shows a strong correlation between the number of workspaces completed and students' end-of-year exam scale scores.

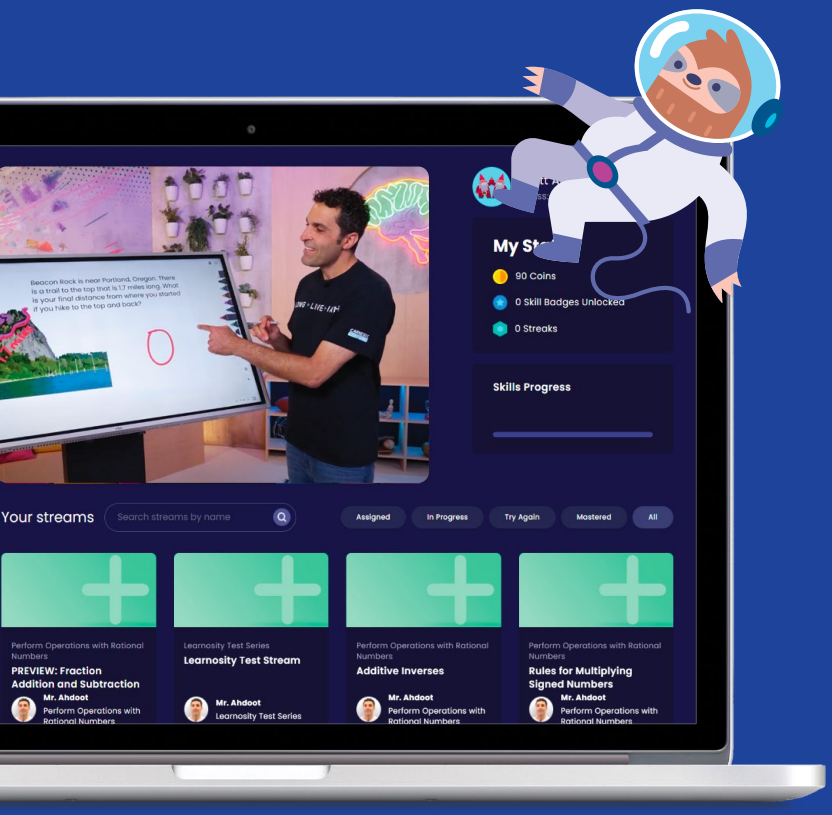
On average, a student who completed ten additional workspaces saw an end-of-year exam scale score increase of 13–25 points.



*When a student raised their APLSE score by 10%, there was an increase of 38–54 points on the end-of-year exam.**



**Ritter et al., 2013; Fancsali et al., 2016; Zheng et al., 2019*



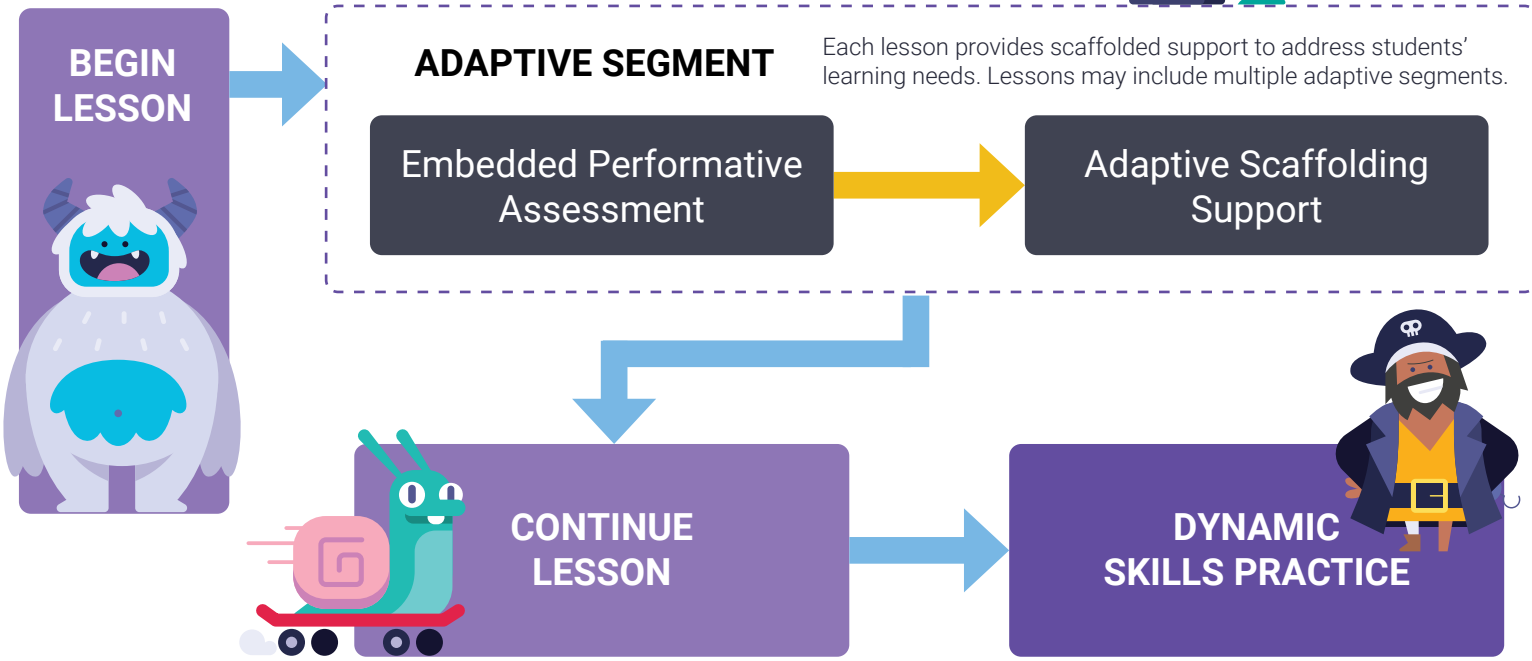
MATHstream: Adaptive Videos. Real Understanding.

MATHstream delivers responsive, scaffolded video instruction from certified math teachers, designed to keep Georgia students engaged, supported, and on track.

Whether reinforcing essential skills, accelerating progress, or providing targeted intervention, MATHstream adapts to student input and delivers real-time feedback throughout each lesson.

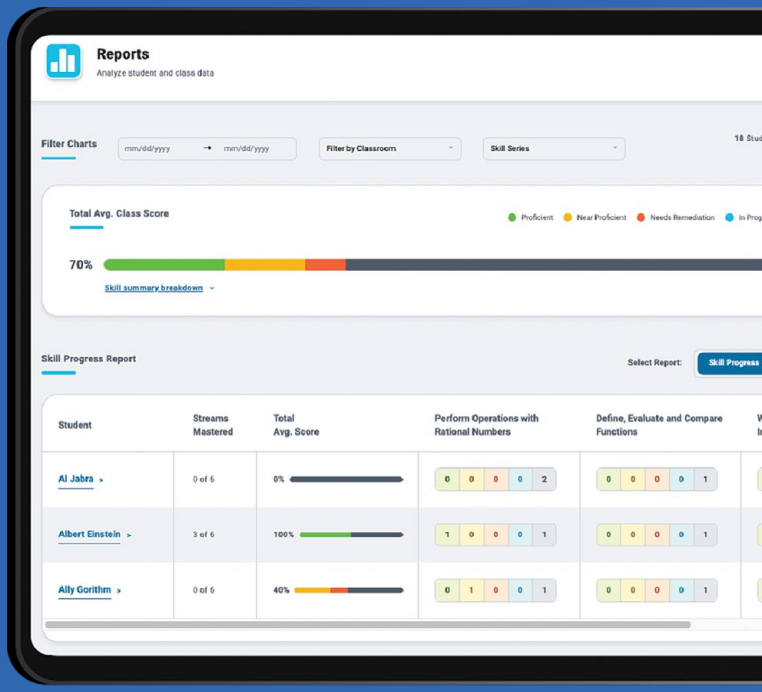
MATHstream in Action:

Adapt to Students in Real-time

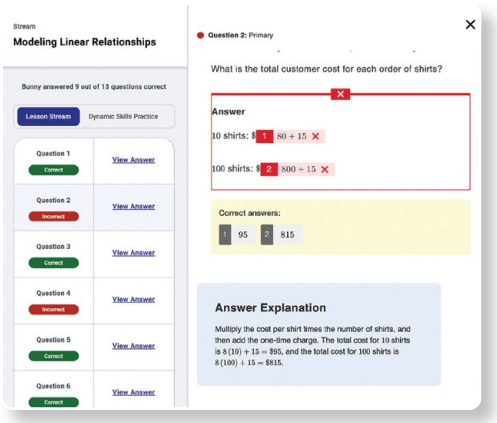


Reports that Empower

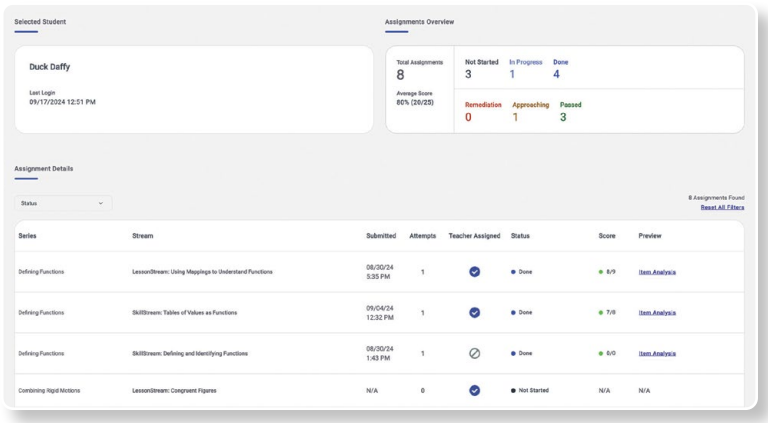
In-depth reports provide valuable insights to inform instructional decisions, including skill progress and student grouping recommendations.



Stream Progress Report shows average scores and skills breakdown by student, with clickable data points for deeper insights.



Item Analysis reveals correct and incorrect responses and student work from lesson streams and practice.



Student Reports provide a snapshot of logins, assignments, proficiency levels, and Skill Stream scores, plus filters to pinpoint where support is needed most.

Stop Searching, Start Teaching with the Clear Learning Center

The Clear Learning Center is your digital home base for our Georgia Middle and High School Math Solutions. It brings planning tools, instructional resources, and data insights together, so you can focus more on teaching and less on tracking things down.

Plan

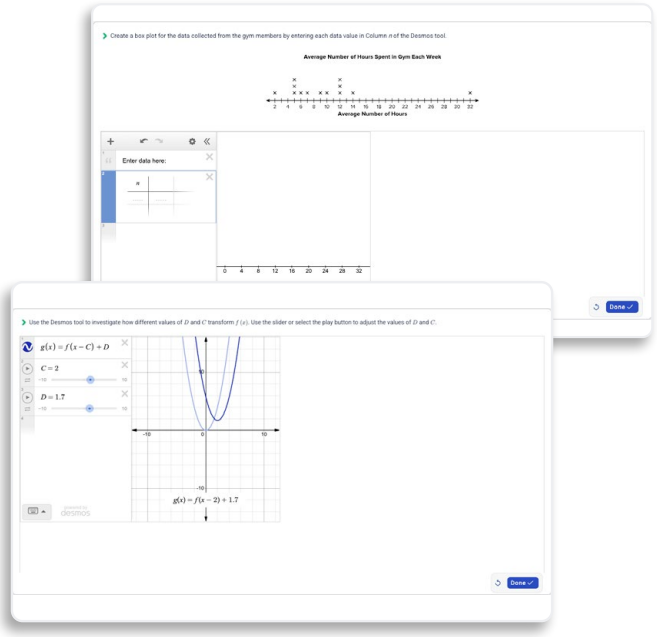
Everything you need to launch meaningful instruction is just a few clicks away.

- Search by keyword, standard, or lesson to quickly find the resources you need
- Access module and topic overviews that make the arc of math visible, connecting each lesson to the bigger progression
- Use daily lesson facilitation notes with pacing, purposeful questions, and embedded supports
- Find MATHia Workspace previews and leveled scaffolds for English Language Learners

Engage

Empower students to explore, discuss, and apply mathematical ideas in meaningful ways.

- Launch each lesson with Activate activities, often powered by Desmos™ tools, to spark curiosity and surface student thinking
- Deliver tasks through the Lesson Slides with interactive student tools and built-in teacher prompts to guide discussion and respond in real time
- Reinforce understanding with targeted, small-group re-engagement lessons
- Support every learner with personalized, just-in-time instruction, whether through MATHia's AI-driven adaptivity, targeted Skills Practice, or adaptive MATHstream video lessons



Assess

As a regular part of the instructional cycle, ongoing formative assessment underlies the entire learning experience.

- Collect and interpret data about student readiness at the Module level
- Get insights to meet every student where they are while they learn collaboratively and individually
- Collect, interpret, and act on data about student progress

Comprehensive Assessment

Through various assessment opportunities, students develop the ability to evaluate themselves, make judgments about their performance, and improve over time. Teachers gain valuable data and insights to make real-time adjustments and plan next steps.

Assessment OF Learning	Assessment FOR Learning	Assessment AS Learning
Course-Level Assessments	ReadyCheck Assessments	Reflect Activities
End-of-Module Assessment	Quick Checks	I Can Statements
End-of-Topic Assessment	Purposeful Questions	MATHia Progress Trackers
Pre- and Post-Topic Assessment	Student Look-Fors	Learning Reflections
Course-Level Assessments	Ongoing Assessments embedded in the teacher facilitation notes	
Performance Task	MATHia Insights	

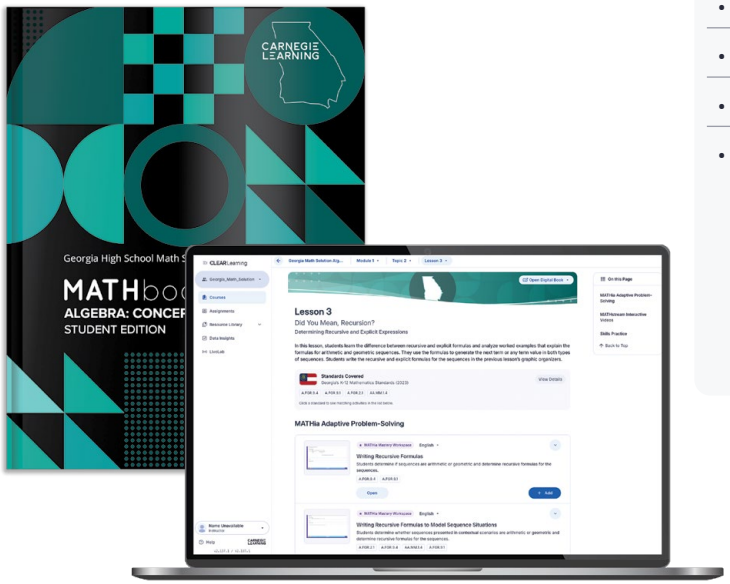
PROGRAM COMPONENTS

Teacher Resources

Teacher's Implementation Guide (TIG)

The TIG provides easy-to-implement resources for planning and point-of-use facilitation.

- Module and Topic Overviews
- Lesson Resources
- Step-by-step guidance to support facilitation and deepen understanding
- Embedded supports
- Differentiation Strategies
- Common Misconceptions and Student Look-fors
- Questions to Support Discourse
- EL strategies to support multilingual learners
- Introductory lesson to establish classroom culture
- Ongoing informal assessment support



Digital Resources

The Clear Learning Center provides access to planning and implementation support resources.

- Digital Teacher Implementation Guide
  - Downloadable resources at point of use
- Module Overview Videos
- Topic Summaries
- Lesson Slides
- Worked Example Videos
- Home Connection Website
- Family Guides
- Activity Resources
- Lesson Planning Templates
- Practice
  - Skills Practice
  - Mixed Practice
- Assessments
- MATHia personalized instruction
- LiveLab real-time student data
- MATHstream adaptive, interactive instructional videos
- Class and student-level reports
  - Adaptive Personalized Learning Score (APLSE) Report
  - Progress Report
  - Session Report
  - Skills Report
  - Standards Report

PROGRAM COMPONENTS

Student Resources†

Interactive Text

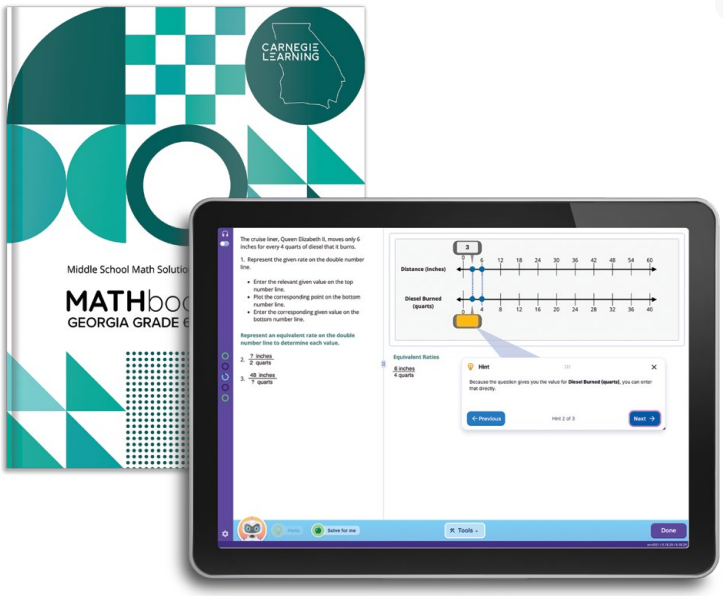
A consumable textbook for learning and self-reflection.

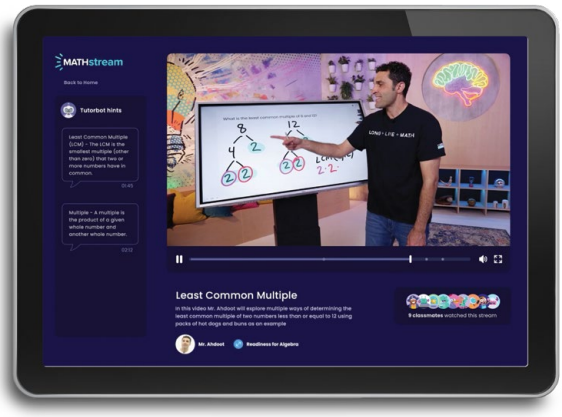
- Lessons activate prior knowledge
- Minds-on activities drive student ownership of learning
- Formative assessments allow students to demonstrate their understanding
- Assignments for practice

Digital Resources

The Clear Learning Center provides students and families with access to digital resources for learning, practice, and assessment.

- Interactive text
- Desmos Calculators: Scientific, Function, Graphing, Geometry Tools
- LiveHint real-time support for textbook assignments
- MATHia: AI-driven, one-to-one online coaching software that adapts to meet individual student needs
  - Step-by-step instruction for concept development and skills mastery
  - On-demand hints support student agency
  - Just-in-time hints provide personalized information
- MATHstream: Adaptive, interactive instructional videos

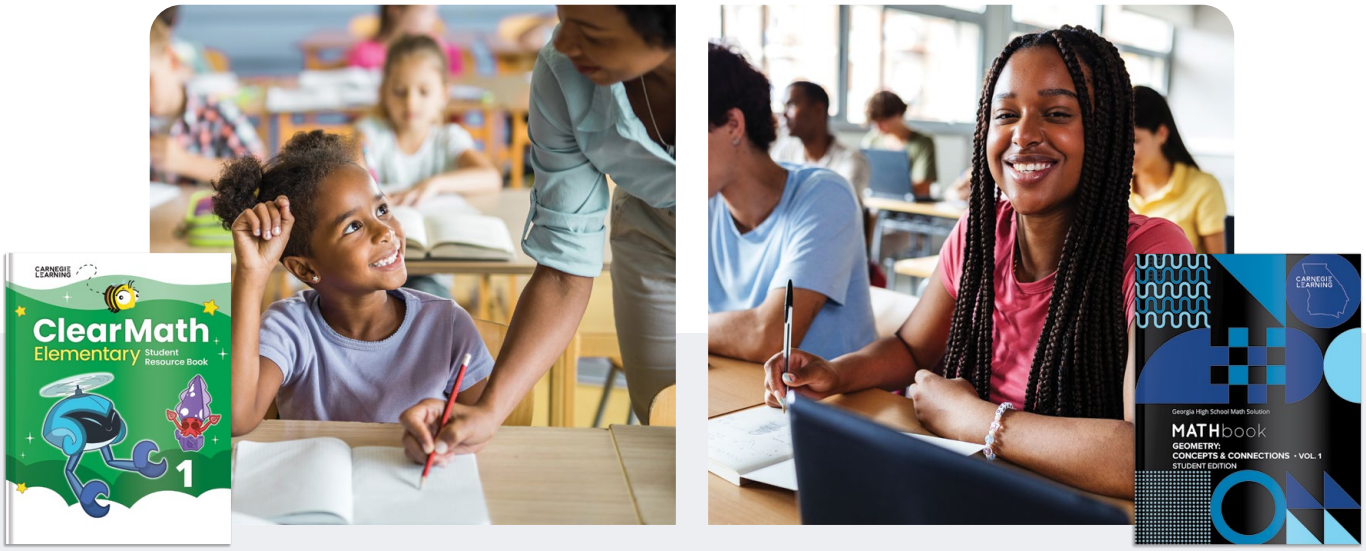




†*Available in English and Spanish*

We're all in on Georgia math education

Carnegie Learning provides K–12 core and supplemental math solutions and out-of-this-world professional learning programs built to seamlessly work together so students are able to think, learn, and do their best.



How do we know that every student is a math person?

We've got over 25 years of experience as the leading provider of research-based math solutions—proven to deliver up to 2x performance improvement on standardized tests—and a team of cognitive and computer scientists who are dedicated to tirelessly finding new and better ways to support teachers and students.

That's how we know every student is a math person.

Continue your exploration here:

www.carnegielearning.com/georgia-math

CARNEGIE LEARNING