



Program Overview



¡Arriba las
Matemáticas!™

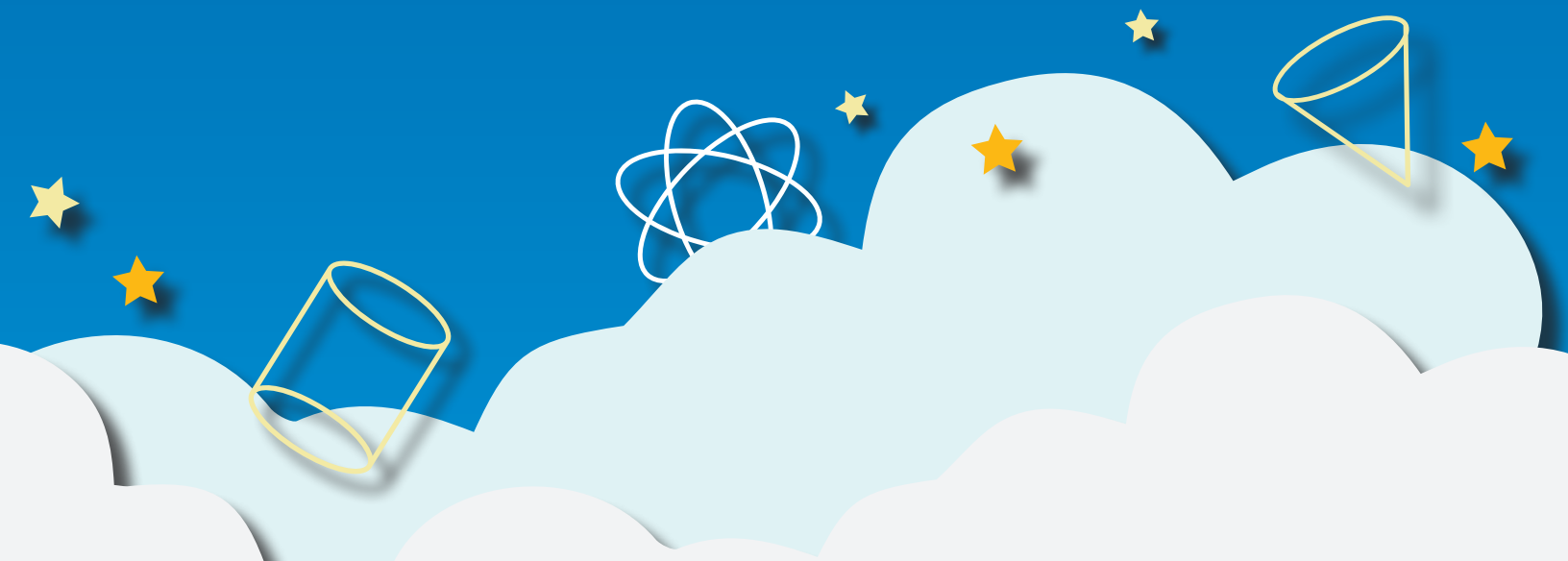
GRADES 6–8

Power Student Growth

Imagine a math classroom filled with students who are ready to tackle any problem, supported by a teacher who has the tools and instructional techniques needed to ensure success. *Into Math*® uses a growth mindset approach to learning for students and real feedback from teachers to drive growth for each and every learner.

Into Math is part of the HMH® connected teaching experience, which brings together assessment, instruction, and professional learning into one seamless and streamlined system.

Explore what makes the *Into Math* experience the comprehensive, total solution needed to accelerate growth and make students unstoppable in the classroom.





Into Math was built
to ensure growth for each
and every student.

The journey toward a true
depth of understanding and
a culture of growth in every
mathematics classroom
becomes an achievable
reality with *Into Math*.

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Connected Teaching and Learning

The world has changed. And we know that you are now being challenged to deliver the same quality instruction whether you are in a classroom or are delivering that instruction through remote learning.

We have been listening to you, and we understand you want a partner who delivers quality instruction, supports social and emotional learning, and allows you to pivot and provide distance learning as needed while still keeping a strong sense of your school community.

Our goal at HMH is simple. It is to support you the teacher in your goals and the inspirational work you do to create an unstoppable math classroom within and beyond its walls.





Foster a Culture of Growth

Build a learning culture where all embrace learning mathematics by using the research and support of Mindset Works® and social-emotional learning, combined with powerful data analytics and dynamic teacher supports.

Create Fearless Problem Solvers

Intentionally designed lessons and high-quality mathematical tasks help students develop productive perseverance in problem solving and apply knowledge to higher-level mathematics and beyond.



Invest in You

Embedded tools and technology ensure you have the time you need to focus on facilitating the mathematical discourse and differentiated instruction required to support students in reaching proficiency.





Streamline Your Teaching

HMH Connected Teaching and Learning provides an intuitive user experience where easy-to-administer assessments, flexible core instruction, personalized supplemental practice and intervention, and meaningful professional learning are connected to empower teaching and learning—all on a single learning platform.

Growth Measure

Single growth measure supports differentiation and benchmarking to drive placement, grouping, and targeted instruction.

Core

Best-in-class digital-first approach enables both in classroom and remote learning.

Supplemental

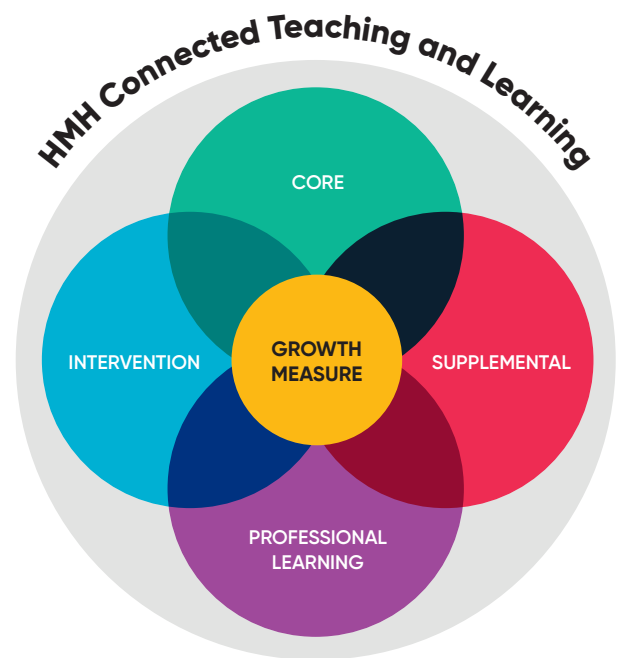
Flexible solutions address the diverse skills of all learners.

Professional Learning

On-demand and live online resources give educators point-of-use support for class, community, and caregivers.

Intervention

Adaptive, digital solutions for intervention, prevention, and acceleration towards grade level proficiency.





► BUILD

- A Love of Mathematics
- Academic Vocabulary
- Foundational Skills
- Conceptual Understanding, Procedural Fluency, Application

► ENGAGE

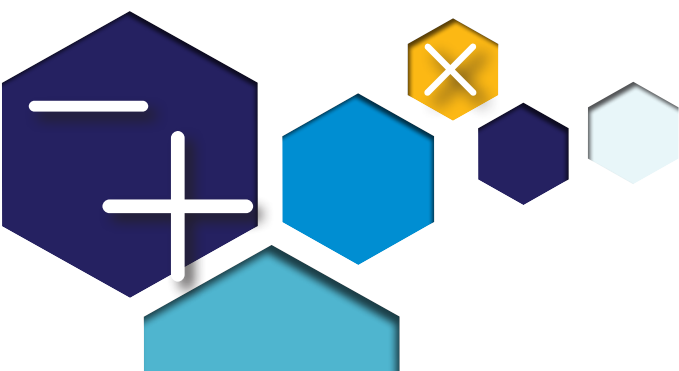
- STEM Connections
- Student Choice
- Independent Practice

► TRANSFORM

- Perseverance in Problem Solving
- Resilience
- Social and Emotional Learning

► SPARK

- Data-Driven Instruction
- Differentiated Support for All Learners
- Continuous, Connected Learning



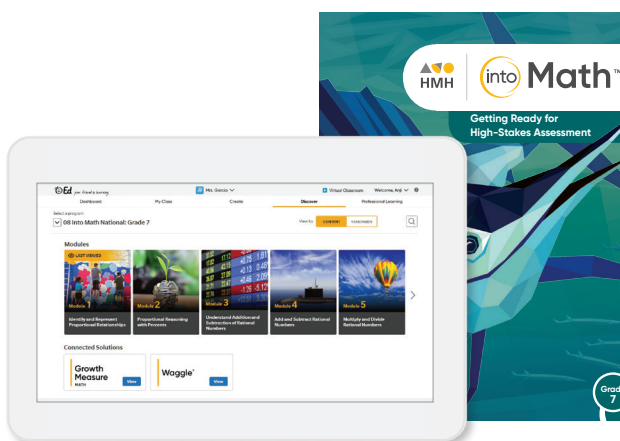


Connect Your Assessment, Instruction, and Professional Learning

With HMH's *Into Math* you and your school will have access to rich content and standards-based instruction assessments with actionable data insights, professional learning, and supplemental practice and instruction—all connected on *Ed*, the HMH learning platform.

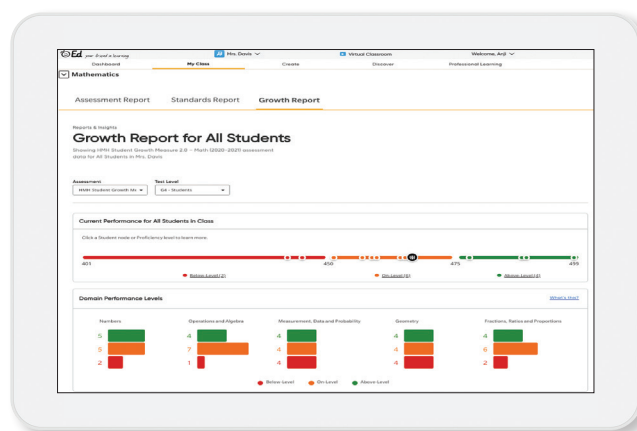
With these tools and professional services all within one seamless experience, we can ensure you that your students will not only reach their instructional goals, but exceed them.

Comprehensive Mathematics Program for Grades K–8



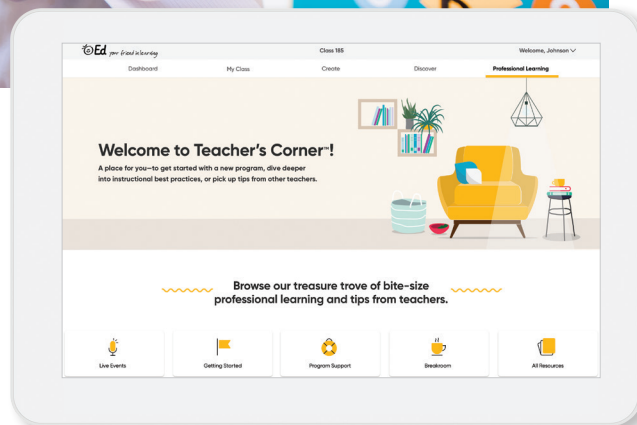
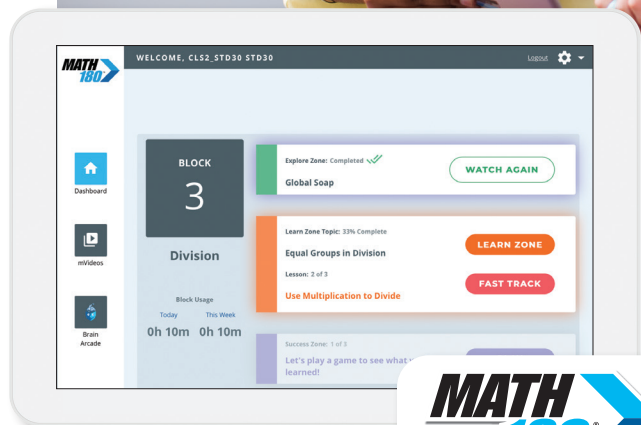
Rich Content and Standards-Based Instruction

- Research-based, explicit, systematic instruction
- Resources and support for whole-class, small-group, and independent work
- Materials for striving and advanced learners
- Spanish Mathematics resources for students with *HMH ¡Arriba las Matemáticas!*



Assessments and Actionable Data Insights

- Embedded formative assessments
- Growth Measure reports that inform instructional decisions, planning, and grouping
- Ongoing progress monitoring



Intensive Intervention

- Developed for Tier II and III students in Grades 5–12 who are two or more years behind grade-level proficiency
- Focused on deep understanding and mastery of the essential skills and concepts necessary to unlock advanced mathematics
- Personalized instruction with an accelerated path to algebra
- Growth Mindset integration for motivation and advancement

Professional Learning

- Implementation support: Getting Started for every teacher
- Teacher's Corner™: curated, on-demand curriculum-aligned content and teaching support
- Online team coaching tailored to your learning needs



Transform Mathematics Fear into Enthusiasm

What separates a toddler's attempt to reach a favorite toy from your students' attempts to make sense of fractions? The toddler tackles the problem without fear. Your students are natural problem solvers. What they often lack is a set of strategies for overcoming fear and tapping into their innate perseverance.

Into Math emphasizes effort in learning to reignite your students' beliefs that they're unstoppable. From embedded growth mindset tasks and explicit **social-emotional** instruction that support students in building critical thinking skills, to independent learning activities that encourage productive perseverance, *Into Math* transforms mathematics fear into mathematics enthusiasm.





Harness the Power of Mindset with HMH's Exclusive Partnership

Embedded mindset tasks that emphasize effort in learning and reignite a sense of curiosity combine with independent learning tasks that encourage students to collaborate with their peers to solve complex problems. **The result? Mathematics fear transforms into mathematics enthusiasm.**

I'm in a Learning Mindset!

What can I apply from previous work with ratios and rates to recognize when a relationship between two quantities can be described by a constant unit rate?

Learning Mindset

Perseverance Checks for Understanding

Have students identify some examples of ratios and rates in a real-world context, and write them on the board. Lead the class to conclude that all ratios and rates relate two separate quantities, such as price and amount, or distance and time. Then discuss constant unit rates, in which the denominator is 1. *In this lesson, we are applying a new concept to ideas that we learned before. How do you use your knowledge about ratios and rates to determine if it makes sense to use a unit rate or another constant rate to describe a relationship?*

Grade 7

Learning Mindset
 Strategic Help-Seeking Identifies Need for Help

Strategic help-seeking is more than just asking for help with a task. It means recognizing when you need help and knowing where to find it. Strategic help-seekers look for help that promotes their learning and understanding, not just for help that gives them the answer. Here are some ideas to think about when it comes to getting help.

- Do you need help? Avoid the habit of always asking for help right away—giving yourself a chance to struggle with a task is a great way to learn. On the other hand, if you've been struggling for some time and cannot move forward, that is a sign you may need some help.
- Where can you find help? Think about people, tools, references, and other resources.
- What help do you need? You have a better chance of getting the help you need if you can clearly communicate what you need assistance with. It may be useful to write down a question or sentence about what is challenging you or holding you back. Be as specific as you can.

Reflect

- ❓ How do you know when you need help with a task?
- ❓ What resources did you use to help you understand and complete the STEM Task?

98

Grade 7

The research-based tasks and strategies from Mindset Works within each lesson allow students to see firsthand what they've learned and reflect on their progress.

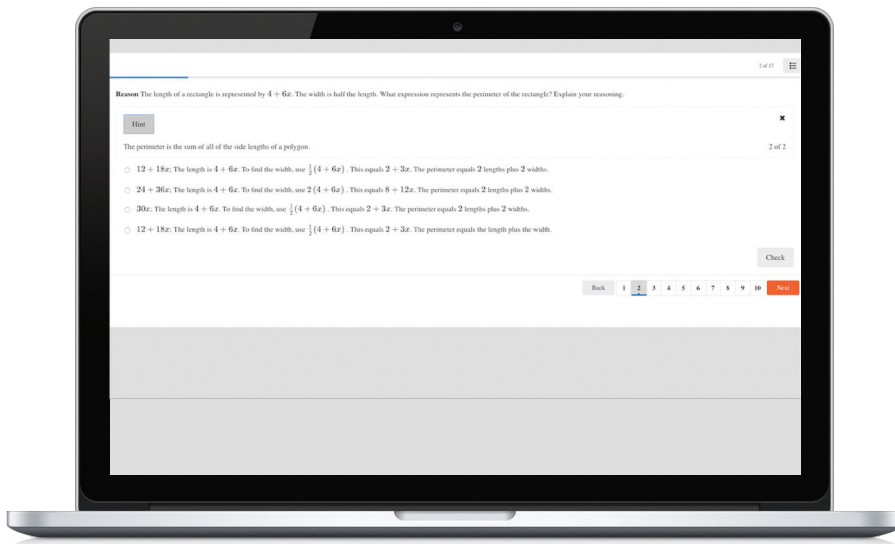


Inspire Students to Understand Their Effort Matters

What dictates motivation? Why are some students persistent at problem solving while others are quick to give up? The answer lies in mindset and each student's belief in the power of effort.

A growth mindset guides students to understand that with perseverance they can be successful. As students put forth effort and witness their own success, they'll **WANT** to continue to challenge themselves as learners. Through our exclusive partnership with Mindset Works, *Into Math* helps teachers put strategies for developing a growth mindset into action.

How do we help students monitor their own learning with the appropriate supports?



Interactive lessons on *Ed*, the HMH learning platform, provide students with meaningful feedback and promote perseverance, using learning aids such as

- Helpful hints
- Multiple attempts
- Corrective feedback
- Correct answers



I Can

The scale below can help you and your students understand their progress on a learning goal.



4

I am proficient in adding, subtracting, factoring and expanding linear expressions with rational coefficients. I feel that I can explain this lesson to someone who is struggling.

3

I can identify problems that require me to add, subtract, factor and expand linear expressions with rational coefficients.

2

I can add and subtract linear expressions.

1

I can recognize linear expressions.

Put It in Writing

Explain the process by which you factor a linear expression.

Exit Tickets and **"I Can" scales** provide your students with tangible ways to monitor and celebrate their growth.

Exit Ticket

The base of an isosceles triangle is represented by the expression $3x - 1$. Each of the legs of the isosceles triangle is twice the base. Write an expression for the perimeter of the triangle listing each side. Simplify the expression.

$$(3x - 1) + 2(3x - 1) + 2(3x - 1); 15x - 5$$

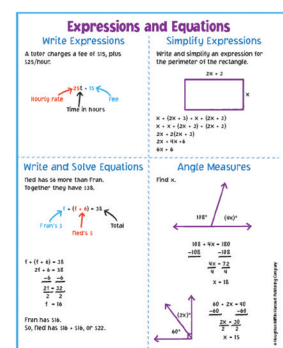
ANCHOR-CHART OPTION

As you progress through the module, build and display an anchor chart.

CONNECT MATH IDEAS, REASONING, AND LANGUAGE
Collect and Display

Have students build their own anchor chart.

A completed chart for the module is shown here.



Put It in Writing provides opportunities for self-reflection and critical analysis.

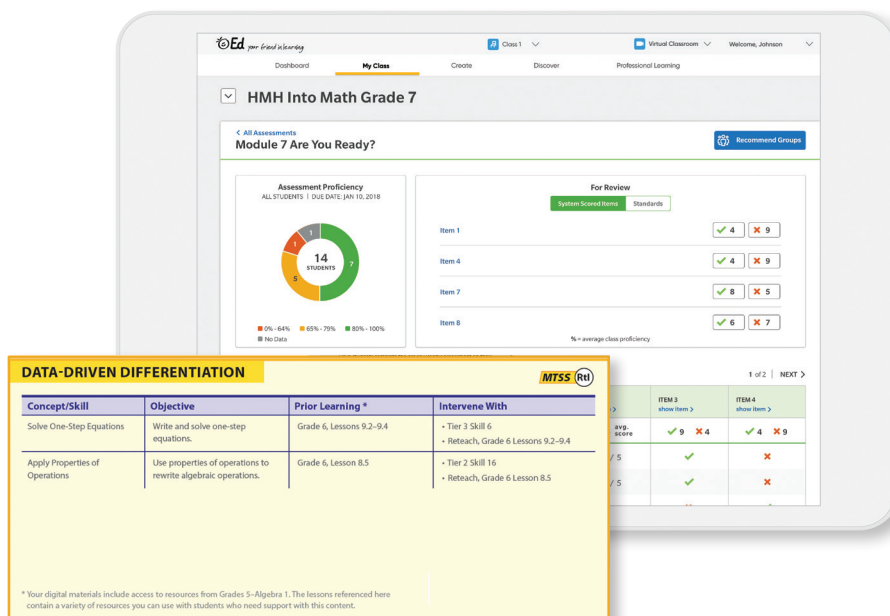
Build **anchor charts** with your class or use the pre made options provided.

Into Math is . . . a solution designed
**TO HELP STUDENTS PERSEVERE AND
KNOW THEY CAN DO MATHEMATICS**
in your classroom and beyond.



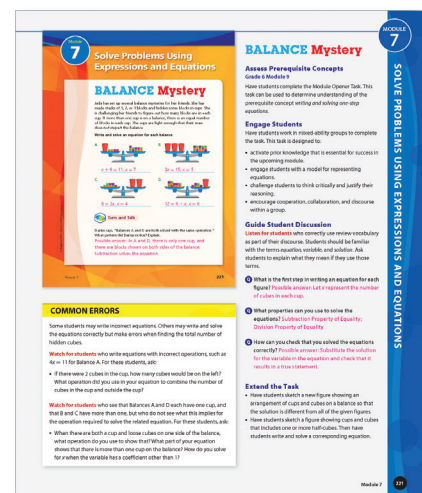
Keep Your Finger on the Pulse of Student Progress

In order to help students grow, you need to be able to understand where they are academically and what they need. Assessment tools, embedded throughout, monitor individual student progress and provide you with valuable insights every step of the way. Monitoring student progress and providing the appropriate student supports is streamlined for your preferred instructional delivery method: face-to-face, blended, or virtual instructional delivery.

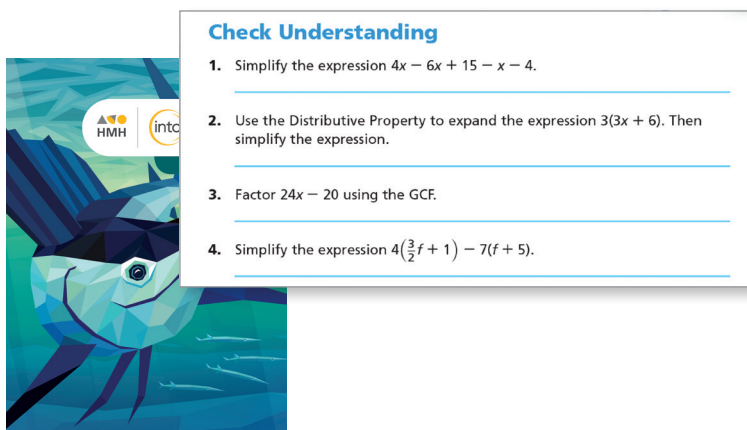


Are You Ready? diagnostic assessments help you pinpoint students' gaps in skills needed for success in the upcoming module. They are available in the Student Edition or as an interactive online assessment.

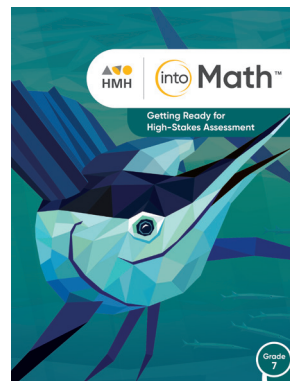
The **Module Opener** embedded within the Student Edition is a game-like diagnostic used to assess concept readiness for the upcoming module.



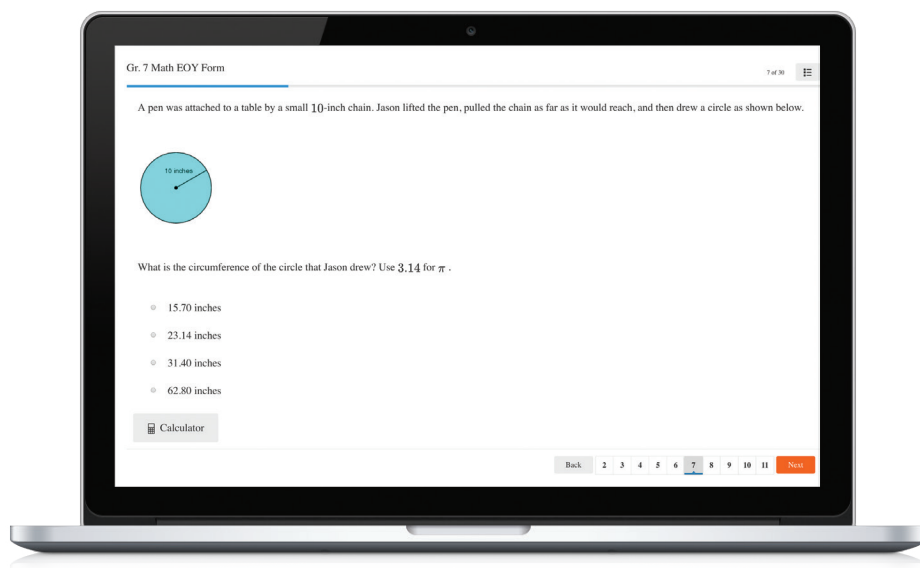
Diagnostic, Summative, and Formative Assessments are easily accessible for teachers and students



Check Understanding formative assessments are just one way teachers and students can monitor progress within the lesson.



Module and Unit Assessments have multiple forms that can be edited. The **High-Stakes Assessment** book provides sample tests, standards-based lessons, and more.



All assessments, including Benchmark Assessments, are assignable and autoscored online with multiple item-types, mirroring what students will encounter on high-stakes assessments.



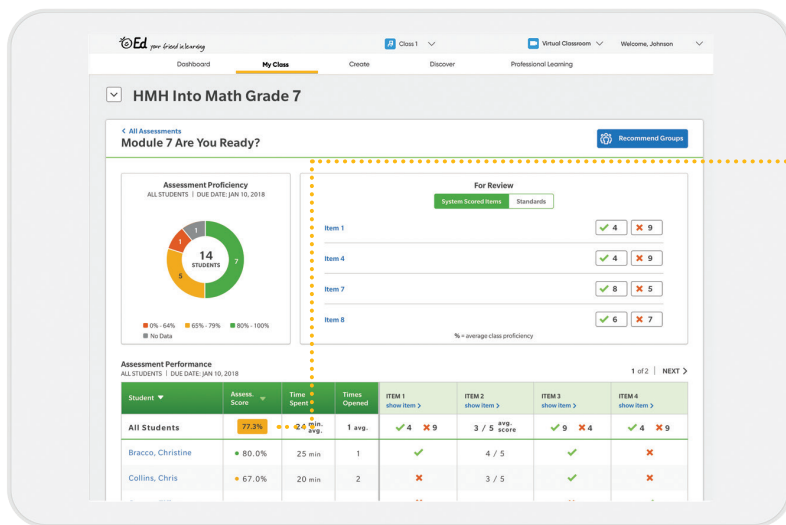
Differentiate Learning and Assemble **Flexible Groups**

The data provided by our assessment tools help teachers identify the resources they can use to differentiate instruction in order to support student learning. Depending on their individual needs, students can move flexibly in and out of groups all year long. This equitable approach can be used when and where it is needed to ensure students thrive.



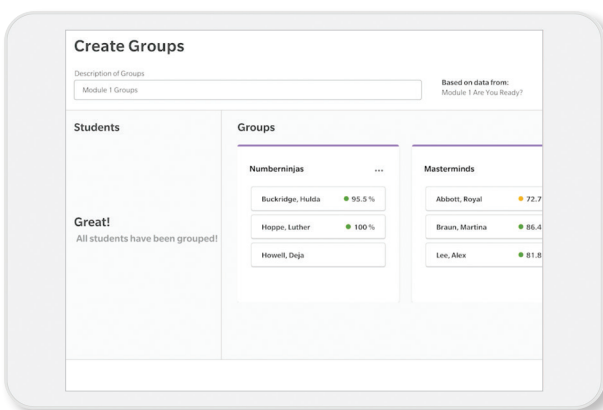
Mr. Baxter receives class and student scores for the Module 7 Are You Ready? Diagnostic Assessment.



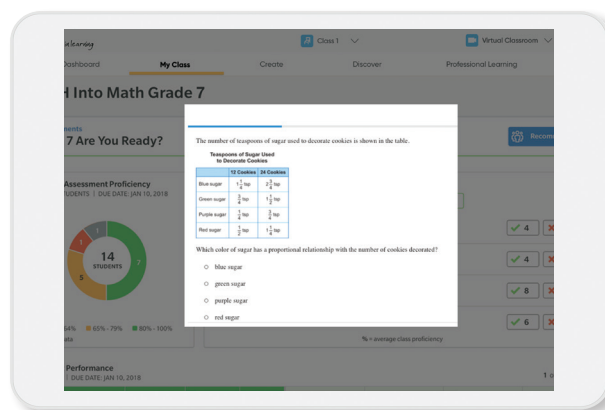


The average test score for the class is 77.3%. Mr. Baxter wants to see which students are ready to be challenged more, which students have mastered the concepts and skills, and which students need more targeted support.

After administering any assessment, Mr. Baxter can immediately review the class performance on *Ed*. He can quickly see a class-level breakdown of performance, as well as which items he should review with his students. From here, he can select the **Grouping Report** to have *Ed* sort the students into performance groups automatically. **Item Analysis, Assessment Reports, Standards Reports, and Suggested Resources** are just a click away for Mr. Baxter.



Groups are suggested based on student performance on assessments. Teachers can then modify these to form mixed-ability and other groupings.



Drilling down into the data, teachers can analyze which items students have answered incorrectly or correctly. The items can be reviewed as a class, in groups, or one-on-one.



Track Yearly Progress with HMH Growth Measure

Meeting students' varied needs begins with a reliable benchmark assessment. HMH Growth Measure is the adaptive assessment that provides timely insights into student proficiency and connects these insights with *Into Math* program data. Make the most of your assessment data with Growth Measure on *Ed*—one test, one place, meaningful connections.



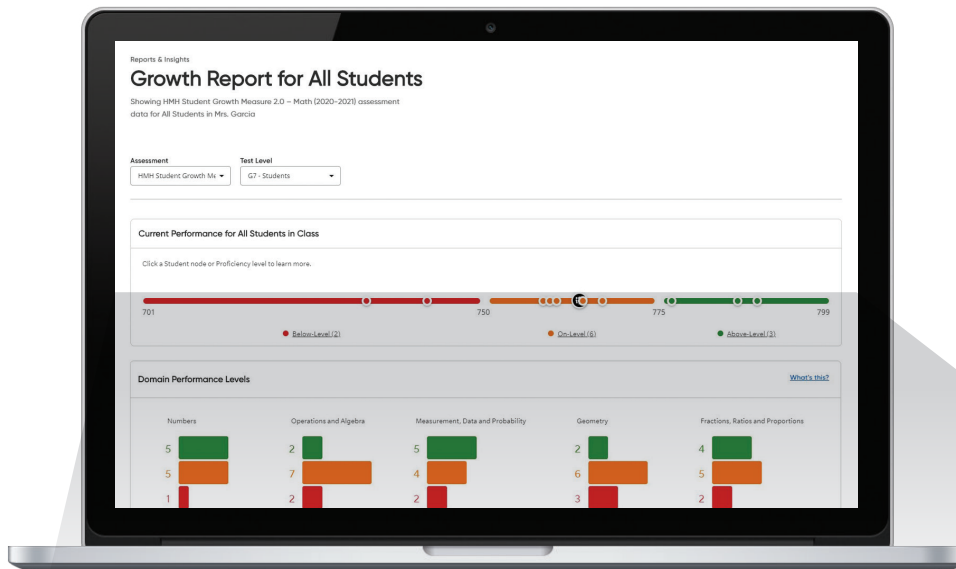
Christine Bracco is a seventh-grade student who has gained 100 Quantile® measures from the beginning to the middle of the year. Her teacher can see her Math Growth Measure data from previous years to track her progress year over year.





Benchmark assessment data from **HMH Growth Measure** combine with in-program assessment data from *Into Math* in the Standards and Growth Reports to form a more complete picture of a student's knowledge.

- Administer with Ease
- Assess in a Meaningful Way
- Connect Assessment with Relevant Practice in *Waggle*

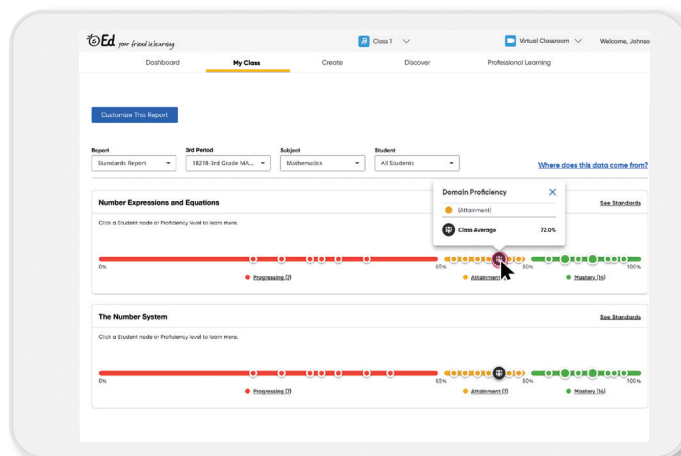


All Growth Measure Assessment Data

3 of 3 | End of Year Test Event

STUDENT	TEST DATE	TIME SPENT	HMH SCALED SCORE	PERFORMANCE LEVEL What's this?	CHANGE FROM PREVIOUS TEST	GRADE LEVEL EQUIVALENCY What's this?	STUDENT GROWTH INDEX What's this?	CURRENT LEXILE INTERVAL
SG Sophia Gonzales	Jan 25, 2020	23 min	760	On Level	7	At Grade (1.00)	Met (0.93)	820 - 970
DG Dulcie Green	Jan 25, 2020	35 min	776	Above Level	9	Above Grade (1.34)	Exceeded (1.12)	1015 - 1165
TJ Tylin Johnson	Jan 25, 2020	32 min	742	Below Level	2	>1 Grade Below (0.57)	Did Not Meet (0.81)	600 - 750
AS Adithya Sreenivasan	Jan 25, 2020	29 min	767	On Level	7	At Grade (1.16)	Met (0.98)	905 - 1055

Intuitive Reports highlight Student Growth, Standards Mastery, Assessment Performance, Item Analysis, and more.





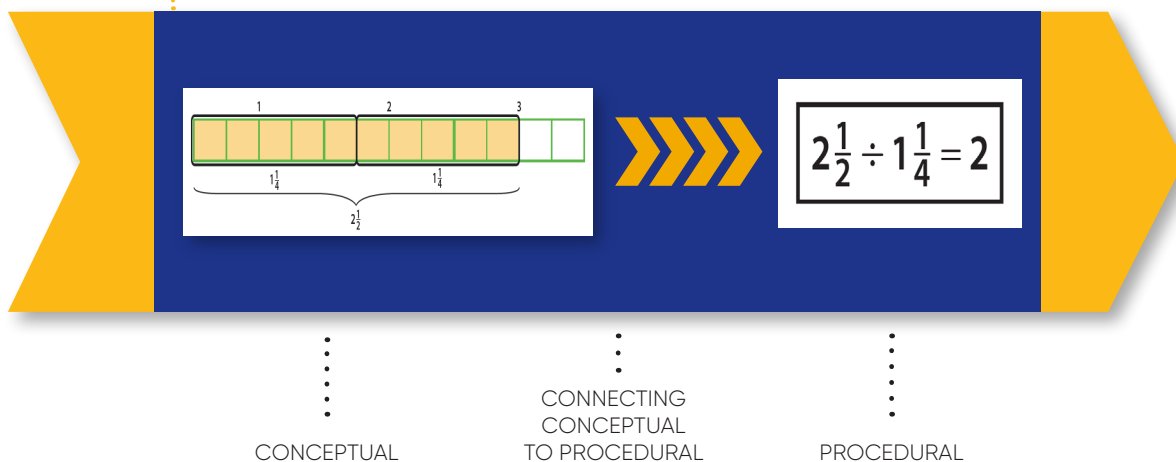
Success You Can Measure and Celebrate

Into Math's unique lesson design provides a purposeful path to conceptual understanding and procedural fluency. This is achieved because *Into Math*

- Emphasizes the importance of the “why” behind the “how”
- Allows students to build a deep understanding of mathematical concepts
- Connects conceptual to procedural lessons in a purposeful way
- Ensures students develop the ability to effectively apply understanding to higher level mathematical thinking
- Provides actionable data to identify gaps in knowledge with resources for teachers to target and repair these gaps

● A New Approach to Building Conceptual Understanding and Procedural Fluency

Into Math's unique learning progression intentionally links the conceptual with the procedural to boost students' mathematical thinking skills.



Lessons Build Off One Another to Make Learning Second Nature

Students are guided through lessons that build off one another to support students in developing the ability to apply what they're learning in your mathematics classroom to new situations.

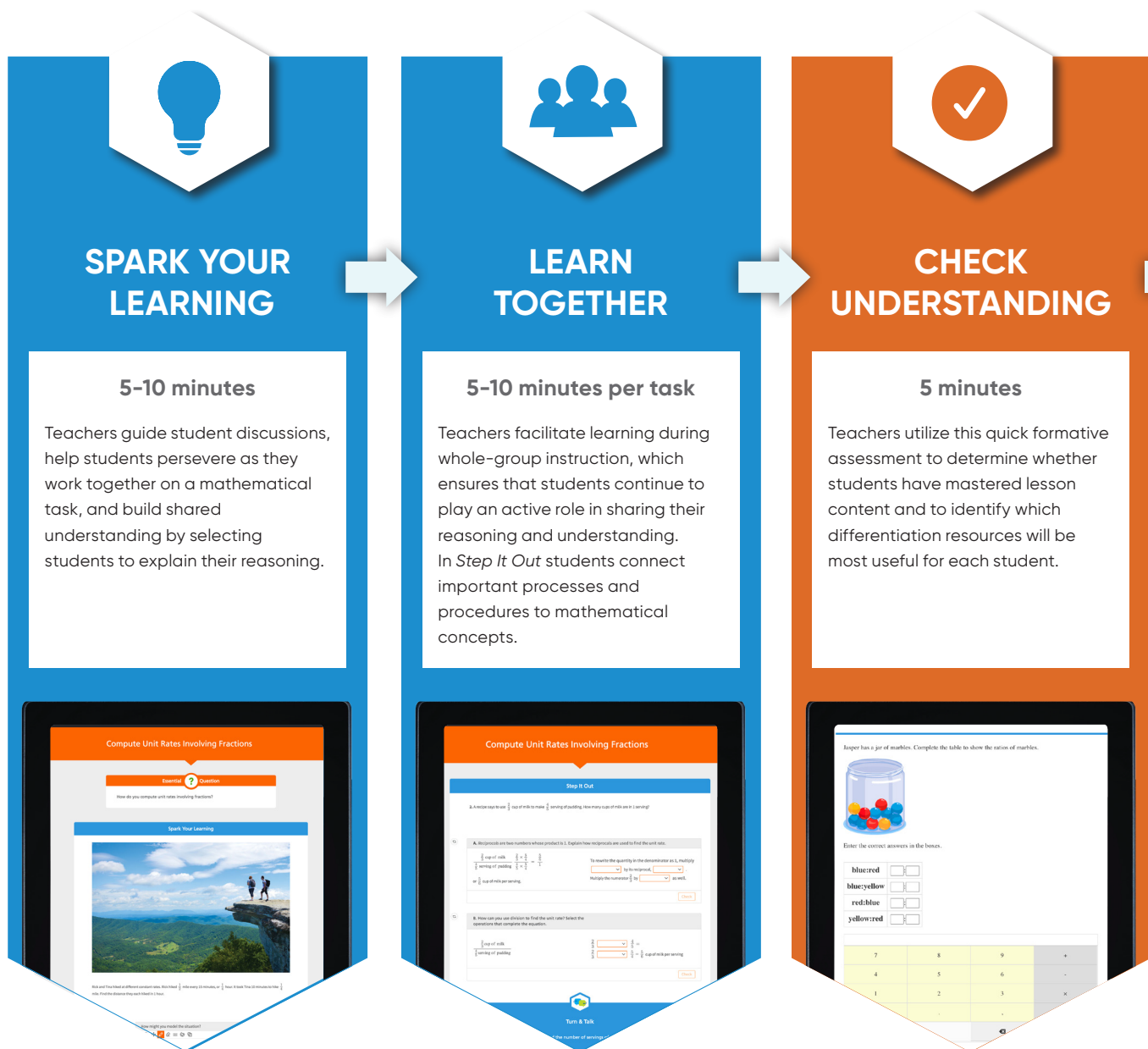
During lessons, students are doing more than using manipulatives, drawings, or algorithms to solve a problem. Students are

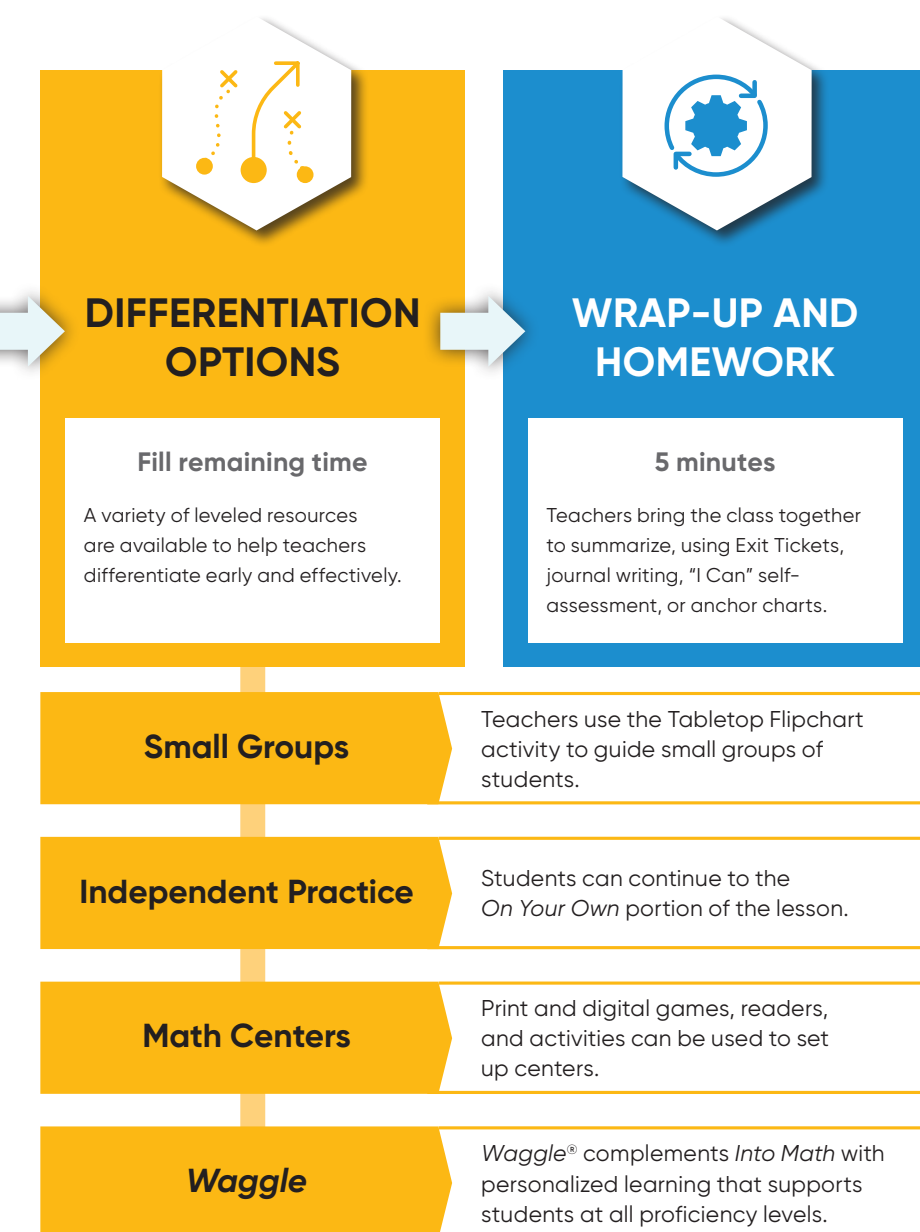
- Analyzing how and why they're using a model or strategy
- Explaining their thinking to their peers
- Making sense of problems in ways that allow easier application to new situations
- Critiquing the thinking of others, constructing viable arguments, and persevering





Unique Lessons Designed for Rigor Right from the Start





Every *Into Math* lesson provides ample opportunities for teachers to

- Engage students
- Check students' understanding as it develops

And for students to

- Practice what they are learning
- Refine their problem-solving skills
- Showcase their growing positive mathematical mindset



Give Students an Empowering Solution That Motivates

As your students embark on their mathematics journey, they need the right supports at the right time. With *Into Math*, high-quality mathematical tasks, opportunities for collaboration and mathematical discourse, digital tools, and games work together to deliver an equitable learning experience that keeps students engaged from beginning to end.

Connect Concepts and Skills
Lesson 2

Name _____

Add, Subtract, and Factor Linear Expressions with Rational Coefficients

I Can identify problems that require me to add, subtract, factor, and expand linear expressions with rational coefficients.

Spark Your Learning

Wallace made a quilt with the regular hexagon pattern shown. On each hexagon piece, he will sew a trim along each side. What expression represents the total length of trim on a hexagon?

$5x + 2$

Turn and Talk

Which is a like term with $5x$: $10x$, $5y$, or 5 ? Explain.

Spark Your Learning

Students choose strategies and develop reasoning to make sense of problems.

Spark Your Learning tasks build a shared understanding and allow learners to engage in the task at their own level. These tasks develop students' productive problem-solving habits and critical mathematical language.

For English learners, embedded **Turn and Talk** activities, designed by our experts at Math Solutions®, build proficiency and confidence while promoting mathematical discourse opportunities.



Add, Subtract, and Factor Linear Expressions with Rational Coefficients

Spark Your Learning

Valerie made a quilt with the regular hexagon pattern shown. On each hexagon piece, she will sew a trim along each side. What expression represents the total length of trim on a hexagon?

Possible answer:
The length of 1 side is $5x + 2$ units, so the total length of 6 sides is $5x + 2 + 5x + 2 + 5x + 2 + 5x + 2 + 5x + 2 + 5x + 2 = 6(5x + 2)$ units.
This is equivalent to $30x + 12$ units.

Turn and Talk Which is a like term with $5x$, $10x$, $5y$, or $5z$? Explain. (Are possible answers all the right).

LESSON 2

1 Spark Your Learning

MOTIVATE

Introduce the problem. **Ask students:** Have you ever made a quilt? Do you know anyone who makes quilts? What kinds of shapes are used in quilts? Tell students to discuss and share with their team members in a small group.

SUPPORT SENSE-MAKING Three Reads

Have students read the problem three times. Use the questions in the Three Reads box below for a different focus each time.

PERSEVERE

If students need support, guide them by asking:

Assessing • Use Tools Which tool could you use to solve the problem? **Students' choices of tools will vary.**

Assessing Look at the picture of the quilt. What do you know about the quilt? **Possible answer:** Each piece is shaped like a regular hexagon with side length $5x + 2$.

Advancing What arithmetic operation can you use to calculate the total length of the trim used on each piece? **addition**

Advancing If you add the six side lengths then what are the like terms? **the six $5x$ terms and the six 2 s**

Turn and Talk Discuss what makes terms *like terms*. Encourage students to share examples and non-examples of like terms. **Possible answer:** $10x$ and $5x$ are like terms. They have the same variable raised to the same exponent, 1.

BUILD SHARED UNDERSTANDING

Select students who used various strategies and tools to share with the class how they solved the problem. Have students discuss why they chose a specific strategy or tool.

Spark Your Learning • Student Samples

During the *Spark Your Learning*, listen and watch for strategies students use. See samples of student work on this page.

Use Multiplication to Represent the Total

Strategy 1

A regular hexagon has 6 equal sides. The length of one side is $5x + 2$ units. Multiply the length of one side by 6. The total length of trim is $6(5x + 2)$. This is equivalent to $30x + 12$.

If students . . . multiply the length of one side by 6, they are demonstrating exemplary understanding of writing a linear expression for a situation.

Have these students . . . explain how they know to multiply the length of one side by 6 to find the total length of trim. **Ask:**

- Why is multiplying a quick way to add?
- Can you write your expression in a different way?

Use Addition to Represent the Total

Strategy 2

A regular hexagon has 6 equal sides. Each side is $5x + 2$. So, the total length of trim is $(5x + 2) + (5x + 2) + (5x + 2) + (5x + 2) + (5x + 2) + (5x + 2)$.

Using algebra tiles to add, I find that I can write the equivalent expression, $30x + 12$ for the length because there are 30 x -tiles and twelve 1-tiles.

If students . . . use repeated addition to find the total length of trim, they may not be thinking that multiplication is a quicker way to add repeatedly.

Activate prior knowledge . . . by having students recall the relationship between addition and multiplication. **Ask:**

- How many sides of equal length does the quilt have?
- How can you use multiplication to find the total length of trim?

COMMON ERROR: Misuses the Distributive Property

A regular hexagon has 6 equal sides. The length of one side is $5x + 2$ units. Multiply the length of one side by 6. The total length of trim is $6(5x + 2) = 6(5x) + 2 = 30x + 2$ units.

If students . . . provide an incorrect expression, they may have incorrectly used the Distributive Property.

Then intervene . . . by reminding students that they need to multiply both terms inside the parentheses by the term outside the parentheses. **Ask:**

- Did you distribute 6 to both terms inside the parentheses?
- What is the product of 6 and 5? What is the product of 6 and 2?

The **Teacher Edition** provides you with guiding questions to help students persevere with the tasks and supportive questions for your EL students.

Corrective Feedback for common errors supports teachers at every step.



Ensure Growth with Handy Resources

Into Math supports the potential growth within each and every student by providing

- English and mathematical language development embedded into every lesson
- Research-based routines that engage all students in listening, speaking, reading, and writing about mathematics
- English Proficiency Level supports that keep the rigor intact while students are mastering the language
- Ongoing assessments that enable teachers to offer targeted and specific instruction for every student's needs (also available in Spanish)

Three Reads Lessons 1.1 and 1.4

Students read a problem three times with a specific focus each time.

1st Read What is the problem about?

2nd Read What do each of the numbers describe?

3rd Read What math questions could you ask about the problem?

Stronger and Clearer Each Time Lessons 1.3, 1.5, and 1.6

Students write their reasoning about a problem, share that reasoning, explain it, listen to feedback, respond to feedback, and then refine their reasoning by writing again.

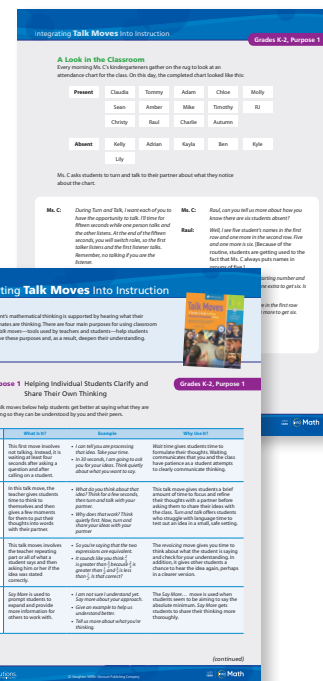
Compare and Connect Lessons 1.2, 1.3, and 1.6

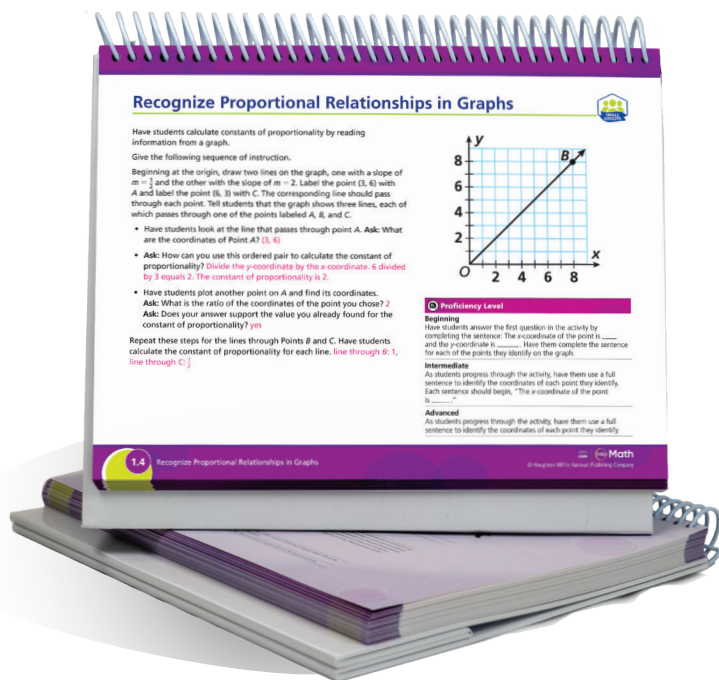
Students listen to a partner's solution strategy, identify it, and then compare it to and contrast it with their own.

Critique, Correct, and Clarify Lesson 1.4

Students correct the work in a flawed explanation, argument, or solution method; share with a partner; and refine the sample work.

Embedded into every lesson, **Language Development Routines** guide you through the steps you need to take to ensure all learners succeed.





Teacher Tabletop Flipcharts provide teachers with pulled small-group, teacher-led tasks for every lesson within *Into Math*.

Teacher Directed Small-Group Mini-Lessons give students the chance to work directly on the skills they need to learn with teacher guidance.

English Language Proficiency Level supports keep the rigor intact for all of your learners of the language of mathematics.

Just-Right Questions stretch student thinking and help them work through challenges. Guided discussion questions offer opportunities for teachers to prompt conversations that build understanding.

Leveled question suggestions with associated Depth of Knowledge (DOK) levels within the Teacher Edition further support the strengthening of student understanding.

Just-Right Questions stretch student thinking and help them work through challenges. Guided discussion questions offer opportunities for teachers to prompt conversations that build understanding.

Leveled question suggestions with associated Depth of Knowledge (DOK) levels within the Teacher Edition further support the strengthening of student understanding.

Apply and Practice

Lesson 4

Name _____

Compare Proportional Relationships

1 Com Identify and compare proportional relationships presented in different ways.

Step It Out

Three friends, Brooklyn, Lincoln, and Taylor, competed in a race over the weekend. Which runner ran the fastest?

A. Choose a point in the table and use it to calculate the pace, in miles per hour, at which Lincoln ran.
Possible answer: (1, 9), 9 miles per 1 hour = 9 mph

B. Taylor's pace is the same as the unit rate, which can be calculated by dividing the y-coordinate by the x-coordinate. Find a point on the graph and use it to calculate the pace, in miles per hour, at which Taylor ran.
Possible answer: (1, 8), 8 miles per 1 hour = 8 mph

C. The unit rates you found can now be compared to the rate at which Brooklyn ran. Which runner ran the fastest? Complete the following sentences.
Brooklyn ran at a rate of _____ miles per hour.
Lincoln ran the fastest because his/her rate is the fastest at _____ miles per hour.

Turn and Talk If you were going to present each runner's rate in the same way for 3 hours, which representation—graph, table, or verbal description—would you choose? Why? See possible answer at the right.

Lincoln

Time (h)	Distance (mi)
0	0
0.5	4.5
1	9

Brooklyn

Brooklyn ran at a rate of 7 miles per hour.

Taylor

LESSON 4

Apply and Practice

1 Learn Together

Step It Out

Task 1 **MP Reason** Students may think that when comparing tables, graphs, and written descriptions, there is only one kind of representation that is correct. Encourage students to develop their understanding and consider their preferences by discussing the features of each representation and how they convey information about the real-world situation.

Sample Guided Discussion:

How does the table show Lincoln's running rate? The rate is the slope, or rise over run.

Turn and Talk If some students are having trouble identifying the running rate from the table or graph, ask other students to explain how the rate can be calculated from the data. Possible answer: I choose a graph, because it demonstrates all the runners' progress across 3 hours and displays how much farther Taylor ran than Lincoln and Brooklyn did.

OPTIMIZE OUTPUT
Stronger and Clearer Each Time

the Turn and Talk. stations have



OPTIMIZE OUTPUT

Stronger and Clearer Each Time

Have students share how they answered the Turn and Talk. As a class, discuss how all three presentations have advantages and are useful in different situations.



More Resources When You Need Them

PLAN FOR DIFFERENTIATED INSTRUCTION MTSS (R)

Small-Group Options
Use these teacher-guided activities with pulled small groups.

On Track

Materials: 16 index cards

- Have students begin by writing one expression per index card.

$4(2x - 3)$	$-8x - 12$
$3x - 4 + 5x + 16$	$12x + 8$
$-7 - (8x + 5)$	$-12x - 8$
$-(-6.2 + 4) - (2x - 5.8)$	$-8x + 12$
$2(6x + 4)$	$-12x + 8$
$0x + 3) + (4x - 10) +$	$8x - 12$
$(6x - 1)$	
$-\frac{1}{2}x - (\frac{1}{3}x + 8)$	$12x - 8$
$(-\frac{3}{4}x + 2) + (-11x - 7) +$	
$(-\frac{1}{8}x + 1)$	$8x + 12$

- Students play this like an memory game (matching equivalent expressions) starting with all 16 cards face-down.
- Play continues until all matches have been made. The player with the most matches is the winner.

Almost There RE

Materials: index cards

Use this Tabletop Flipchart Mini Lesson to provide opportunities for students to use concrete representations of algebraic terms to simplify expressions.

Students should model each expression with cards as shown and then simulate simplifying the expression by using the combining approach for addition to combine like terms. Emphasize the correct terminology for what the students are doing, such as: "Use the Associative Property of Addition to group the like terms."

Tabletop Flipchart Lesson 7.2
Mini-Lesson

Ready for More

Materials: yardstick, strip of cardstock labeled "x" 1 inch strip of cardstock labeled "1 inch"

- Ask students to measure each side of a polygon in the room (such as a tabletop) using the two pieces of cardstock. Students should write an expression for each side such as $6(2x + 3)$ or $(2x - 2)$.
- Ask students to write and simplify an expression for the perimeter of the polygon.
- Finally, have students use the yardstick to measure the length of the cardstock labeled "x" in inches and substitute the value of x into both the original and the simplified perimeter expressions. Make sure that the perimeters match.

Math Center Options
Use these student self-directed activities at centers or stations. Key: P = Print Resources; O = Online Resources

On Track

- More Practice/Homework 7.2
- Fluency Maintenance: Decimal Operations Level 1
- Interactive Glossary: **Associative Property of Addition**, **Commutative Property of Addition**, **equational triangle**, **greatest common factor**, **like terms**, **term**
- Standards Practice: Work with Expressions That Have Rational Coefficients

Almost There

- Reteach 7.2
- Interactive Reteach 7.2
- RII Tier 2 Skill 16: Apply Properties of Operations
- Illustrative Mathematics Ticket to Ride

Ready for More

- Challenge 7.2
- Interactive Challenge 7.2

ONLINE Use data-driven groupings recommendations to engage differentiated learners.
Lesson 7.2 250*

Differentiate for every student with embedded recommendations and resource suggestions.

Have Spanish-speaking students? Engage with them using *¡Arriba las Matemáticas!*™ on Ed with the Interactive Spanish Student Materials, or choose Spanish Unit Project Cards or Game and Activity Cards to engage them in their native language while they practice English with their peers.

Math Task Center Stations provide opportunities for students to work together on games and activities that reinforce lessons, communication between peers, and the Mathematical Processes and Practices.

Proportional or Not Proportional? Unit 1

This game is for 2 players.
Materials: set of game cards, table

Instructions

Step 1 Ask your teacher for a copy of the table shown on the back of this card, along with 16 game cards.

Step 2 Working with a partner, read one game card at a time and decide if the relationship on the card is proportional or not. Relationships are represented using tables, equations, graphs, verbal descriptions, or diagrams. You are not expected to write equations for relationships.

Step 3 Separate the cards into a group labeled **Proportional** and a group labeled **Not Proportional**.

Proportional

Hours	Cost
1	10
2	20
3	30
4	40
5	50

Not Proportional

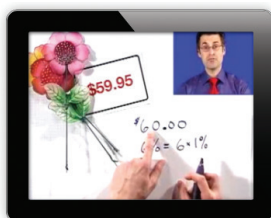
$x = \frac{1}{2}y + 1$

Step 4 For the cards in the proportional group, write the card letters in alphabetical order in the first column of the table.

Card Letter	Independent Variable	Dependent Variable	Constant of Proportionality
Y	Number of shirts	Price (\$)	10

Step 5 Complete the remaining columns of the table for each card. Complete the independent variable and dependent variable columns with the variable or the name of the quantity, and include units if applicable.

Game and Activity Cards



Math on the Spot, located in Family Resources, provides students and families with videos and interactive experiences that help with homework. Additionally, access the **Family Room** for tips and strategies to bolster at-home learning.

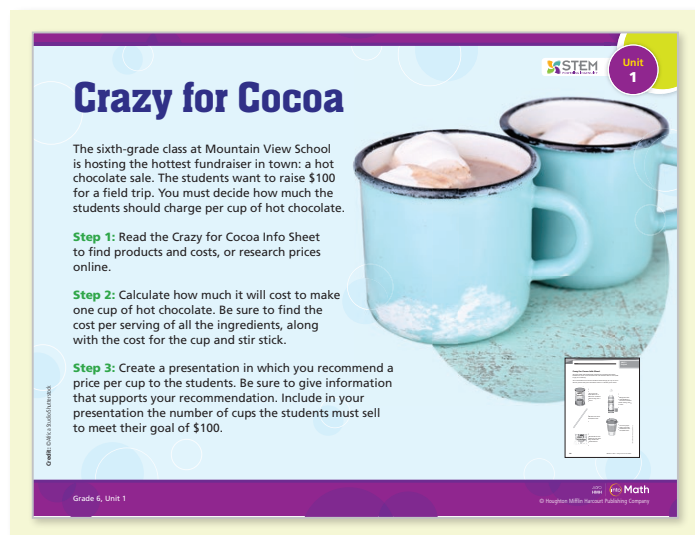




Waggle goes beyond adaptive learning to truly personalize practice and instruction—complementing *Into Math* to support students at all proficiency levels. Combine *Waggle's* supplemental practice, instruction, and formative assessment with *Into Math*.

Waggle™

Contextualized Learning gives students the opportunity to see that mathematics has purpose. Each unit is tied to a career theme and offers related problems that link students' career aspirations to mathematics.



Make Math Enthusiasm a Family Activity

Language Supports for Home empower parents to share in the excitement of their child's math success.

- An English/Spanish **Interactive Glossary** provides students with the space to make sense of key vocabulary terms with their own words and illustrations.
- **A Multilingual eGlossary** translates English vocabulary into nine additional languages.
- **School-Home Letters** highlight what students are learning in the classroom and provide practical applications for parents to join their child on the learning journey.

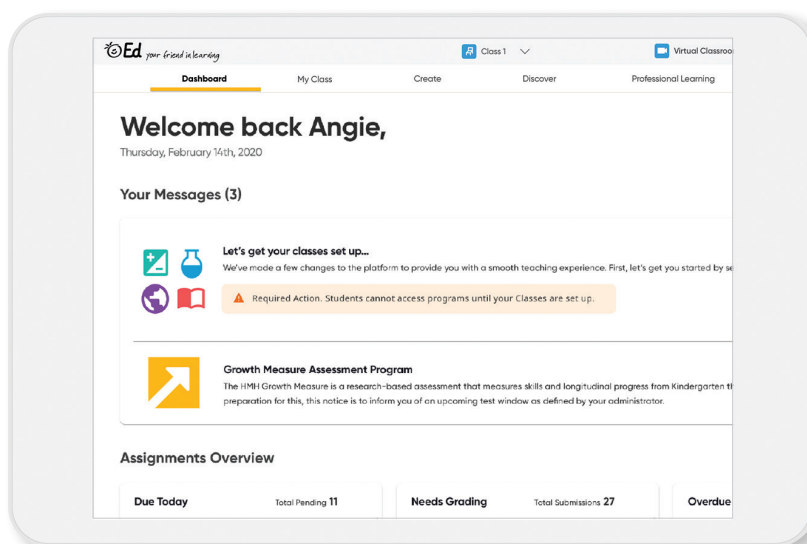


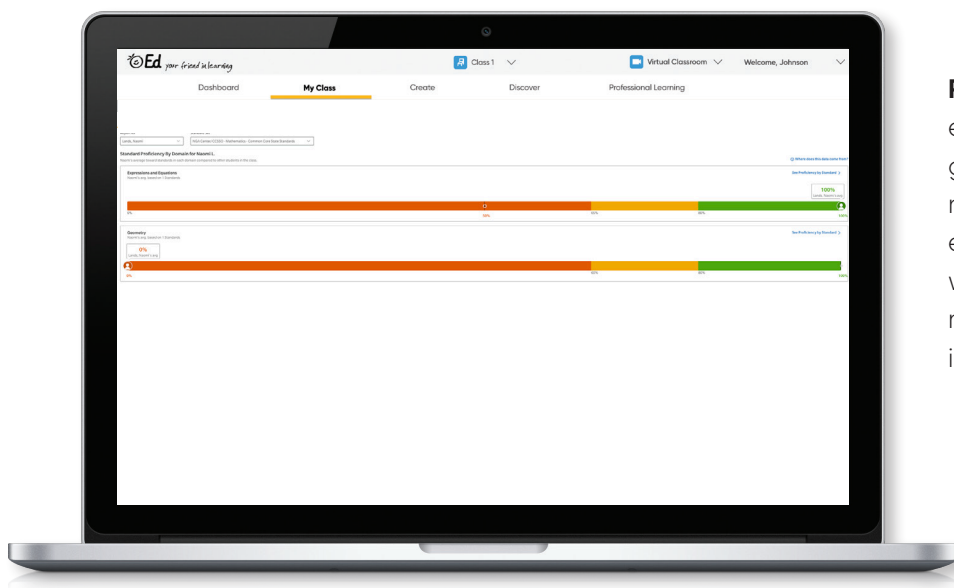
Make the Most of Instructional Time

What do you need to effectively support students as they grow into their potential? More than anything else, you need the ability to make the most of your instructional time.

From the moment you sit down to plan instruction for the year ahead, to the day your students move from your classroom to the next, *Into Math* was designed to support you.

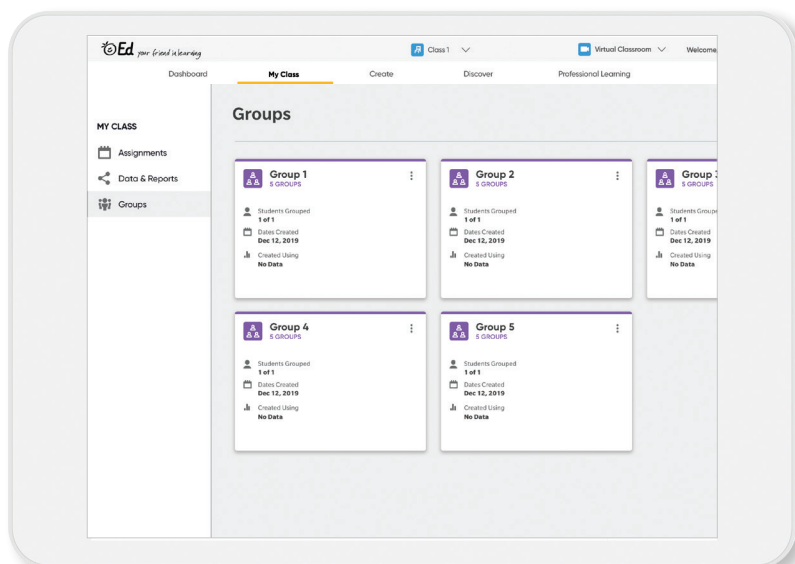
- **Day-to-day planning** is streamlined, ready to use, and customizable.
- **Data collection** is automated and easy to access and interpret.
- **Differentiation strategies and resources** are targeted, clear, and easily implemented.
- **Professional learning** support is embedded throughout every lesson and available on demand for the life of your subscription through Teacher's Corner, your digital hub for professional learning. This is your place to collaborate and dig into content from thought leaders, authors, HMH coaches, and other teachers, for the life of your subscription.





Real-time data insights

empower you to spot proficiency gaps, identify students who are ready to stretch their thinking even further, and match students with targeted resources that meet them where they are in their journey.



Easy-to-use grouping and planning tools allow you efficient sharing of assessments and lesson plans, even in **Google® Classroom**.



Streamline Planning with **All-in-One Resources**

Click the arrow for a drop-down menu of grade-level titles.

Teach virtually with the embedded virtual classroom. Whole-class, small-group, and 1:1 video chats are a click away.

Access all *Into Math* course materials.

Click the down arrow to roster classes and manage programs.

Select a module to view lessons and resources.

Access Teacher's Corner.

Click to view by standard.

Measure math skills and longitudinal progress.

Supplement *Into Math* with *Waggle's* personalized practice and instruction.

Click the arrows on the left and right to advance to different modules to review resources.

The screenshot shows the Ed platform interface. At the top, there's a navigation bar with 'Ed your friend in learning', a user profile 'Mrs. Garcia', and a 'Virtual Classroom' button. Below this is a 'Discover' tab with a search bar and a 'View by' dropdown set to 'CONTENT'. The main area displays a grid of modules for '08 Into Math National: Grade 7'. The modules are: Module 1 (Identify and Represent Proportional Relationships), Module 2 (Proportional Reasoning with Percents), Module 3 (Understand Addition and Subtraction of Rational Numbers), Module 4 (Add and Subtract Rational Numbers), and Module 5 (Multiply and Divide Rational Numbers). Below the modules are 'Connected Solutions' for 'Growth Measure MATH' and 'Waggle'.

Planning is easy with Ed. You can leverage data to create lesson plans as well as assign work to entire classes, multiple classes, or individual students.

Ed, the HMH learning platform, is an online learning system that combines the best of technology, content, and instruction to create a comprehensive teaching and learning experience for every teacher and student. With *Ed*, teachers can easily plan lessons and group students to provide targeted differentiation.



Print Resources for Planning and Differentiation

Major **Supporting** **Additional**

In addition to the one instructional period below, HMH recommends the following:
 • 1 day per unit for the Unit 1 Proportional Reasoning with Scale Drawings
 • 1 day per module for the Module 2: Proportional Reasoning with Percents, Module 3: Understand Addition and Subtraction of Rational Numbers, and Module 4: Use a Number Line to Add and Subtract Rational Numbers
 • 1 day per unit for the Performance Task
 Using these recommendations, the total pacing for Grade 7 is 100 days.

Lesson	Mathematics Standards, Grade 7	Pacing
Unit 1: PROPORTIONAL RELATIONSHIPS		
1.6 Practice Proportional Reasoning with Scale Drawings	■ Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. ■ Use proportional relationships to solve multistep ratio and percent problems. ○ Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	2 days
Module 2: Proportional Reasoning with Percents		
2.1 Percent Change	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.2 Markups and Discounts	■ Use proportional relationships to solve multistep ratio and percent problems. ■ Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.	2 days
2.3 Taxes and Gratuities	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.4 Commissions and Fees	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.5 Simple Interest	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
Unit 2: RATIONAL NUMBER OPERATIONS		
Module 3: Understand Addition and Subtraction of Rational Numbers		
3.1 Add or Subtract a Positive Integer on a Number Line	■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days
3.2 Add or Subtract a Negative Integer on a Number Line	■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days
3.3 Use a Number Line to Add and Subtract Rational Numbers	■ Describe situations in which opposite quantities combine to make 0. ■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days

One day is equal to one instructional period in a traditional schedule and would need to be adjusted to account for longer class periods in a block schedule.

Planning and Pacing Guide **P7G1**

Major **Supporting** **Additional**

In addition to the one instructional period below, HMH recommends the following:
 • 1 day per unit for the Unit 1 Proportional Reasoning with Scale Drawings
 • 1 day per module for the Module 2: Proportional Reasoning with Percents, Module 3: Understand Addition and Subtraction of Rational Numbers, and Module 4: Use a Number Line to Add and Subtract Rational Numbers
 • 1 day per unit for the Performance Task
 Using these recommendations, the total pacing for Grade 7 is 100 days.

Lesson	Mathematics Standards, Grade 7	Pacing
Unit 1: PROPORTIONAL RELATIONSHIPS		
1.6 Practice Proportional Reasoning with Scale Drawings	■ Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. ■ Use proportional relationships to solve multistep ratio and percent problems. ○ Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	2 days
Module 2: Proportional Reasoning with Percents		
2.1 Percent Change	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.2 Markups and Discounts	■ Use proportional relationships to solve multistep ratio and percent problems. ■ Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.	2 days
2.3 Taxes and Gratuities	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.4 Commissions and Fees	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
2.5 Simple Interest	■ Use proportional relationships to solve multistep ratio and percent problems.	2 days
Unit 2: RATIONAL NUMBER OPERATIONS		
Module 3: Understand Addition and Subtraction of Rational Numbers		
3.1 Add or Subtract a Positive Integer on a Number Line	■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days
3.2 Add or Subtract a Negative Integer on a Number Line	■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days
3.3 Use a Number Line to Add and Subtract Rational Numbers	■ Describe situations in which opposite quantities combine to make 0. ■ Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.	2 days

One day is equal to one instructional period in a traditional schedule and would need to be adjusted to account for longer class periods in a block schedule.

Planning and Pacing Guide **P7G2**

Planning and Pacing Guide

Broken out by lesson type, color-coded **Planning and Pacing Guides** walk you through each lesson, module, and unit by spotlighting the mathematics standards you'll be addressing, guiding you in determining the pace of your instruction, and calling out additional resources.

DATA-DRIVEN INTERVENTION			
Concept/Skill	Objective	Prior Learning *	Intervene With
Solve One-Step Equations	Solve equations of the form $x + p = q$ and $px = q$.	Grade 6, Lessons 9.2–9.4	• Tier 3 Skill 6 • Reteach, Grade 6 Lessons 9.2–9.4
Ordered Pairs on the Coordinate Plane	Find and position pairs of rational numbers on a coordinate plane.	Grade 6, Lesson 11.1	• Tier 2 Skill 9 • Reteach, Grade 6 Lesson 11.1
Divide Fractions and Mixed Numbers	Compute quotients of fractions.	Grade 6, Lessons 3.2–3.4	• Tier 2 Skill 6 • Reteach, Grade 6 Lessons 3.2–3.4
Ratio Language	Understand and write ratios.	Grade 6, Lesson 5.1	• Tier 2 Skill 1 • Reteach, Grade 6 Lesson 5.1

* Your digital materials include access to resources from Grades 5–Algebra 1. The lessons referenced here contain a variety of resources you can use with students who need support with this content.

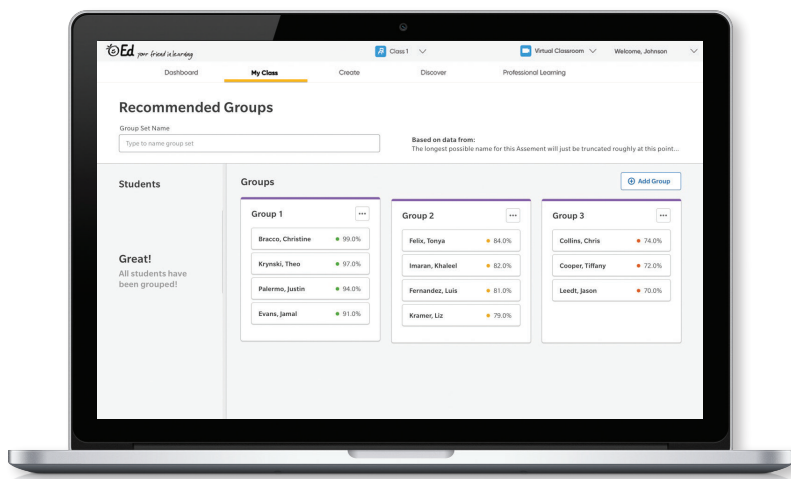
Data-Driven Intervention
 Broken down by concept and skill, **Data-Driven Intervention** call-outs take the guesswork out of closing learning gaps before they take hold.



Actionable Data to Create **Exceptional Lessons**

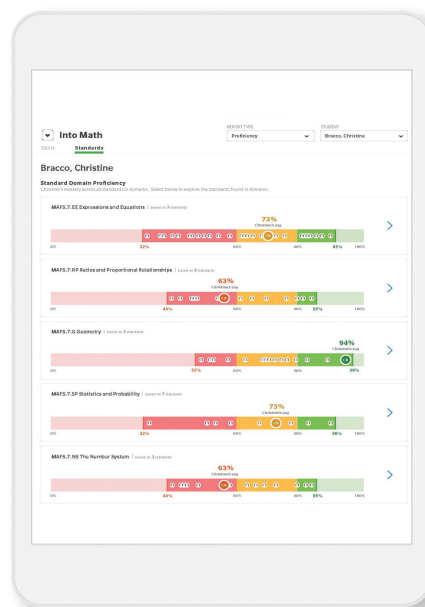
Get a clear picture of where students are on their learning journey with actionable data that are valid and reliable. Comprehensive, real-time assessment data and interactive reports allow you to view your students' strengths and weaknesses as you plan for the resources they'll need.





Grouping Reports assist you in confidently grouping students based on data-driven recommendations. Resources and activities are easily assignable for each grouping.

Teachers, who know their students best, can quickly adjust groups with a simple drag-and-drop feature.



Interactive Reports allow you to drill down into the data to get a clear picture of how each student is performing in relation to grade-level proficiency, standards mastery, and his or her peers.

Equity through Ed

Ensure every student benefits from the resources, supports, and tools *Into Math* provides with access to Spanish resources with *¡Arriba las Matemáticas!*. Teachers also gain access to multiple grade levels of content to support intervention and guide them in stretching student thinking on Ed.





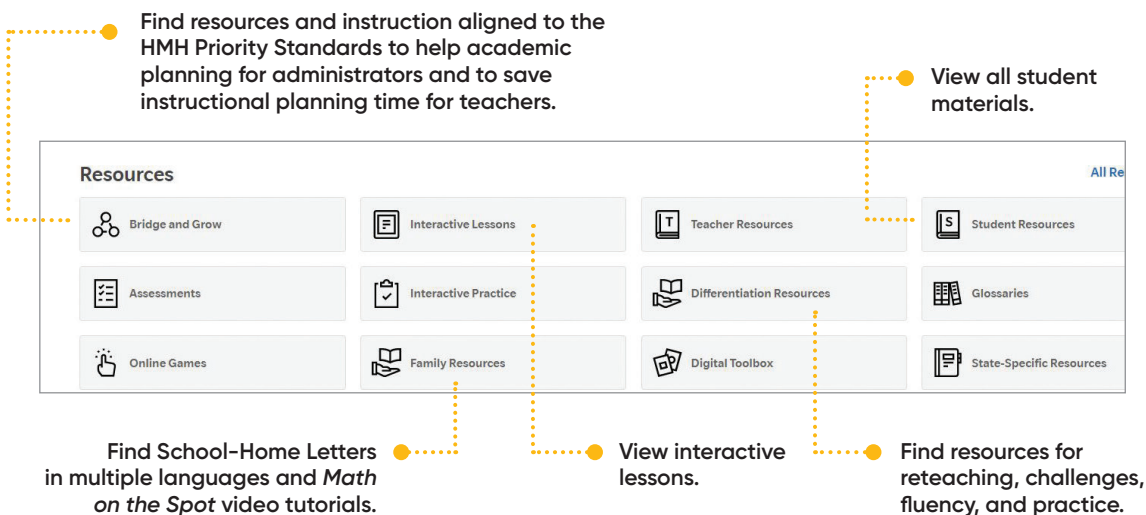
Continuous Support at **Your Fingertips**

We're committed to ensuring your success with *Into Math* throughout the year. You don't expect your students to master all their skills within the first week of school, and the same shouldn't be expected of you. That's why we've designed our professional learning to be ongoing, flexible, and actionable.

Whether you're a first-year mathematics teacher or a teaching veteran, *Into Math* was designed to place learning opportunities at your fingertips every step of the way. From embedded professional learning to job-embedded coaching, experts from Math Solutions take the guesswork out of your implementation and ensure you and your students are successful with *Into Math*.



Ed's Resources are designed to support you in ensuring accessibility and achievement for all students.



Getting Started Training Builds Confidence: Teaching a new program can be overwhelming, especially when you have so many different resources at your fingertips. We know you can't take in every detail before you start teaching, so our Getting Started training is streamlined to focus on preparing you for your first three weeks.

Follow along, explore the program online, and ask a Math Solutions coach questions when they come up.



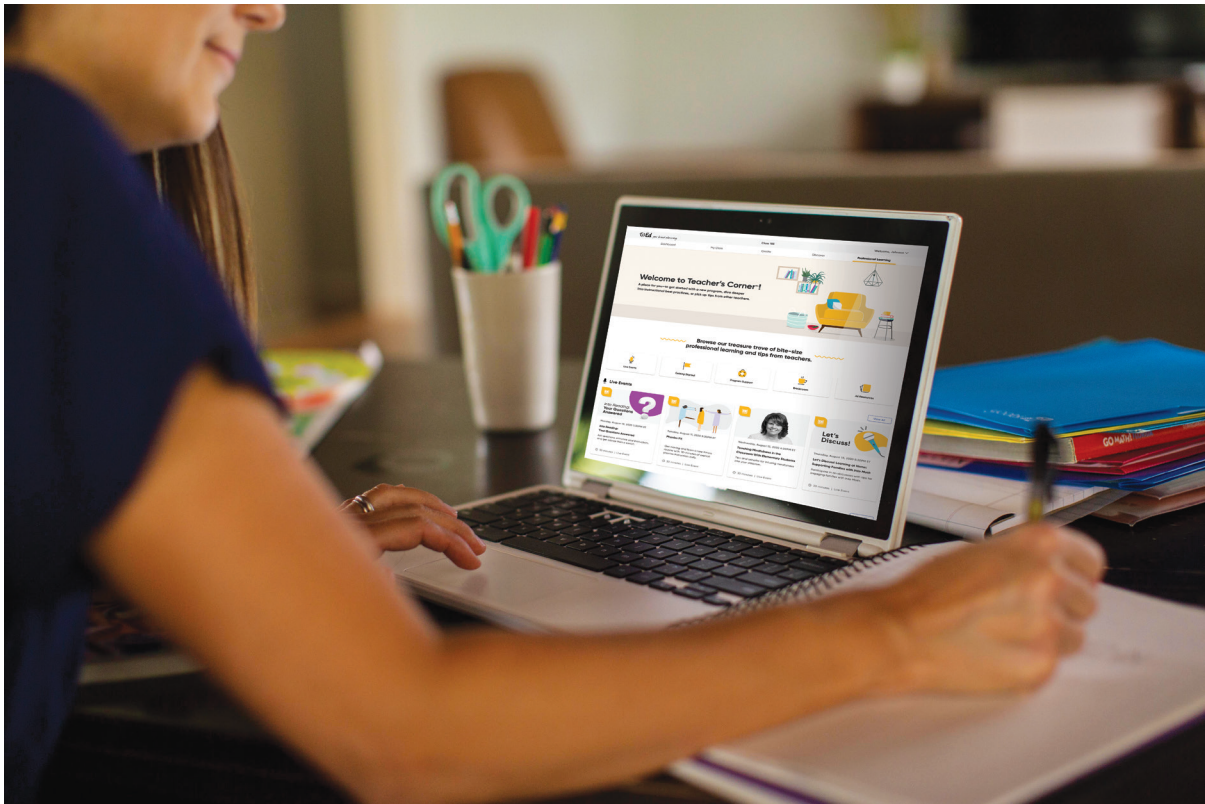
Follow-Up Training Tailored To Your Needs: Once you begin teaching, you'll have more questions and need more support. That's why we provide additional opportunities for you to connect with a Math Solutions coach throughout the year.

Follow-up topics range from support with instructional routines to differentiating instruction. These shorter sessions allow you to stay engaged and build your expertise in a manageable way.



Introducing Teacher's Corner

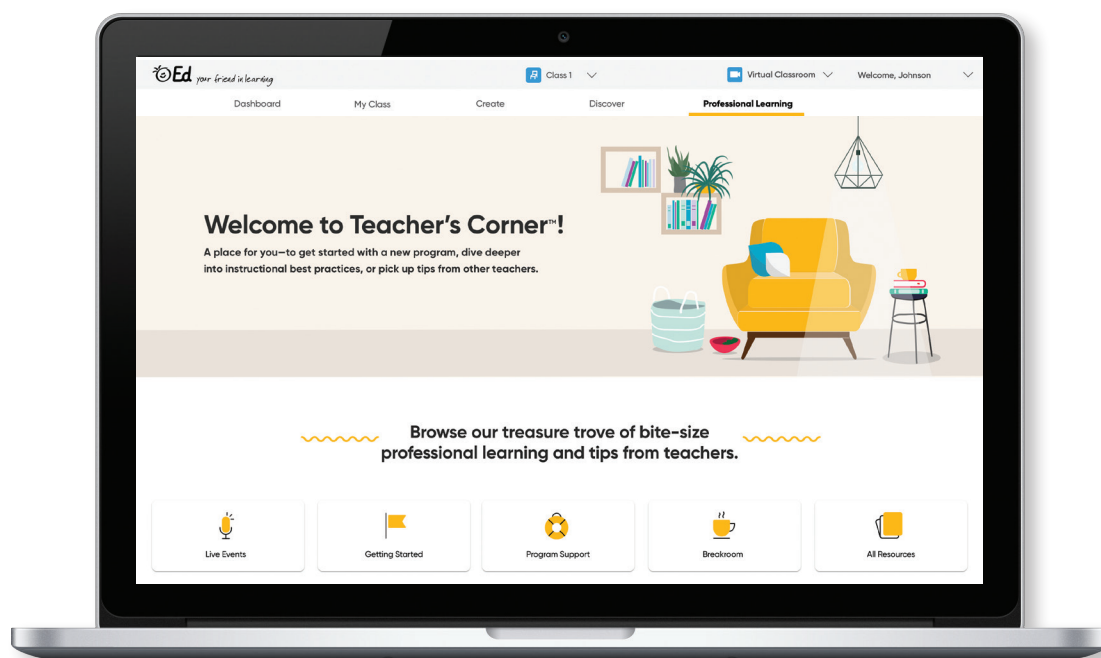
Getting help or refining your practices isn't limited to scheduled trainings or coaching. With Teacher's Corner, you have access to on-demand professional learning and teaching support via *Ed* anytime, anywhere.



Welcome to Teacher's Corner— A Place Just for You.

We want you to feel confident teaching with our programs—and that comes with ongoing support. Teacher's Corner gives you the support you want with an ever-growing library of professional learning resources from authentic classroom videos to tips from other teachers and our team of experienced coaches.

So whether you want to quickly prep for a lesson or invest time in your professional growth, we have trusted resources to enhance your instruction and classroom tomorrow.



On-Demand, But Not One-Size-Fits-All

Teachers have the choice of bite-size professional learning resources that were designed to be easily applicable to tomorrow's instruction. We empower teachers with the information they need to choose what's right for them and offer a variety of media types, duration time, and authors.

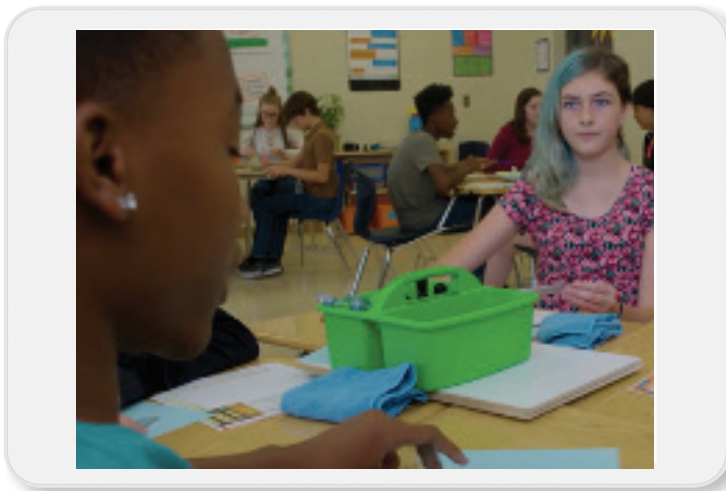
Curated, Trusted Content

There's no shortage of free resources online, but with Teacher's Corner, professional learning and instructional recommendations align to research-based practices. Hear from prominent thought leaders, experienced coaches and former teachers, and practicing teachers.



Relevant and Ready for Tomorrow's Instruction

Teacher's Corner includes authentic classroom videos and articles from teachers who are currently teaching with HMH programs. The number one teacher-requested resource, these videos will build teacher confidence and share how the programs can be tailored to each classroom's unique needs.

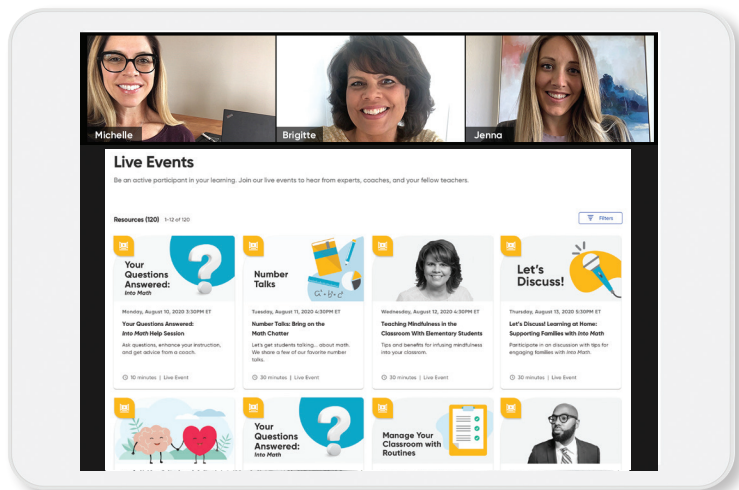


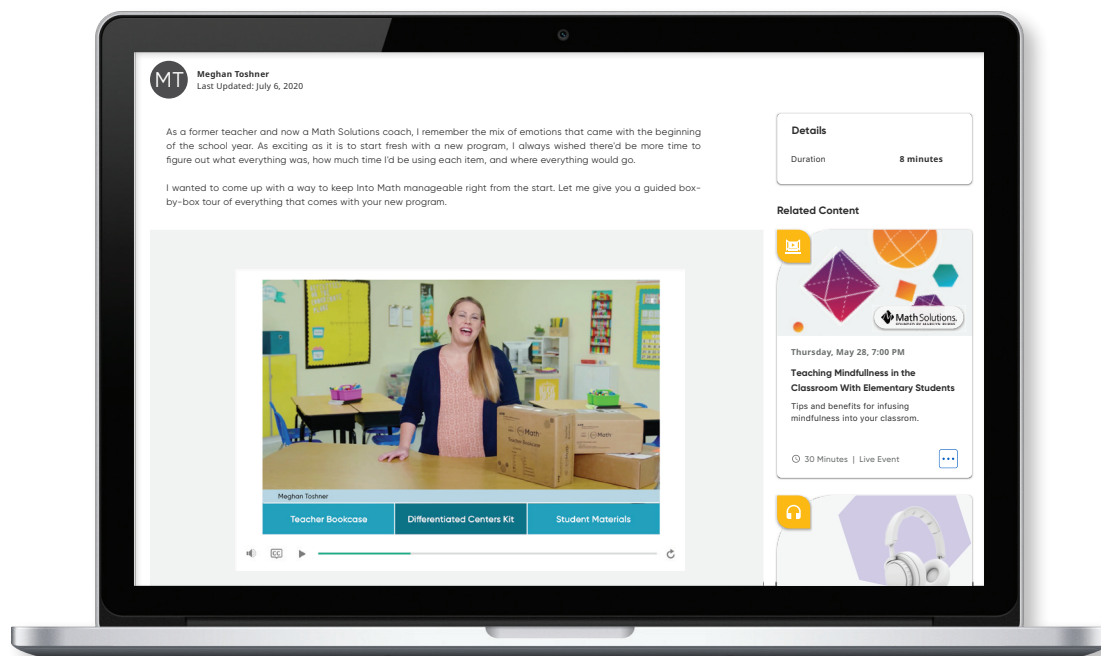
Professional Learning Videos

show teachers how to facilitate Math Talk and guide students in Spark Your Learning tasks.

Live Community Support

Whether they have a question or want implementation advice, our Live Events offer teachers opportunities to connect with HMH coaches and each other. Teachers can register for these online sessions that feature everything from groundbreaking new author research to group discussions facilitated by other teachers.



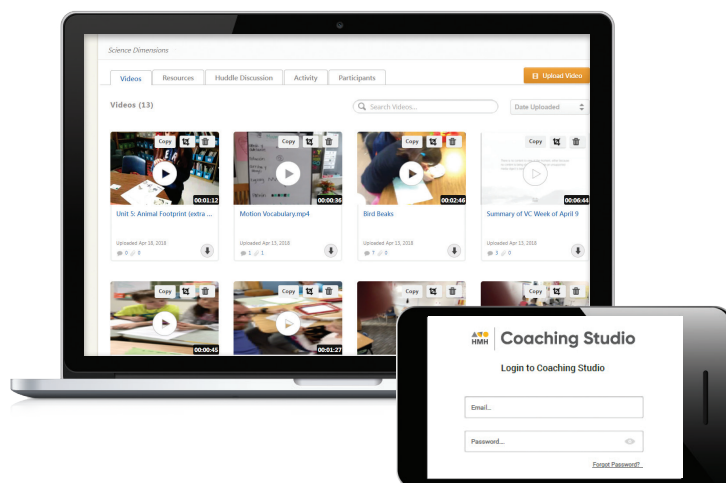


Extend Your Professional Learning

Whether you are interested in focusing on instructional best practices, deepening your content knowledge at each grade level, or closing the achievement gap, Math Solutions can provide the support you need to grow your practice with online coaching, courses, and professional learning communities.

Coaching Studio

Award-winning **HMH Coaching Studio** platform allows you to stay connected with your coach and your colleagues, share and upload resources, and access a library of on-demand lesson-modeling videos.



Extend Fearless Problem Solving **beyond the Classroom**

As our country increasingly depends on STEM careers and competition builds for future jobs, we are focused on the bigger picture: extending fearless problem solving beyond the classroom.

Preparing our students to tackle the challenges ahead starts with a continual investment in you, their educators. *Into Math* provides you with the tools you need to save time, simplify planning, and expand your ability to inspire young minds. You'll see learners become engaged as they master mathematical concepts and skills and discover the power of perseverance.

Let's get *Into Math*!







into Math®



¡Arriba las Matemáticas!™



A Vision for **Student Growth**

Learn more about *Into Math* at hmhco.com/intomath

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