



Program Overview



¡Arriba las
Matemáticas!™

GRADES K–5

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*.

What's Inside

- 04 Connected Teaching Solution
- 08 Foster a Culture of Growth
- 18 Create Fearless Problem Solvers
- 28 Invest in You





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

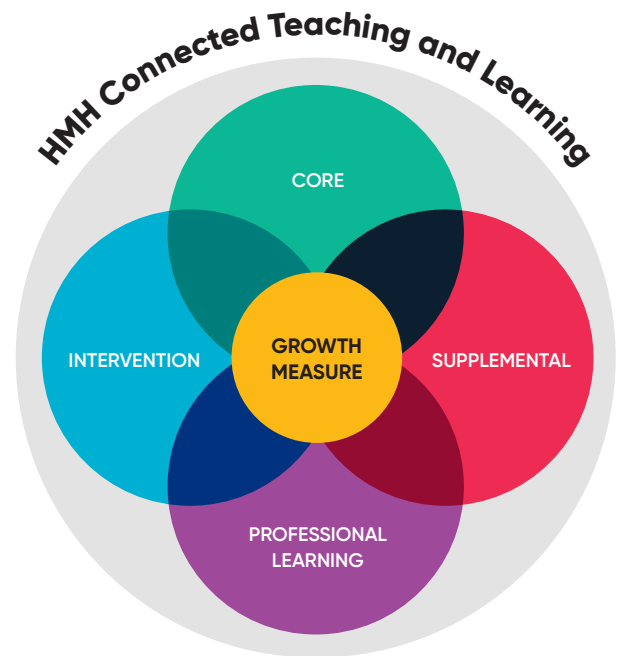
Flexible solutions address the diverse skills of all learners.

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

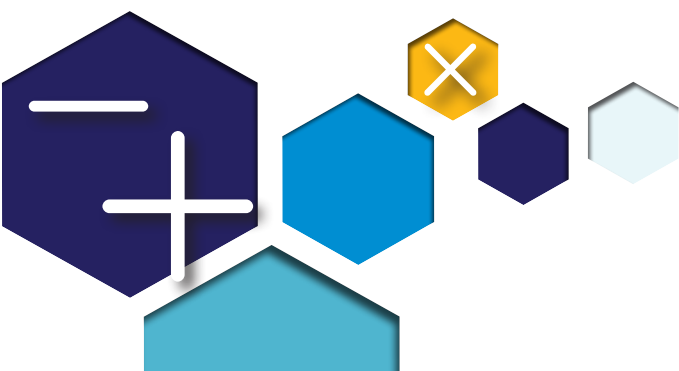
- STEM Connections
- Student Choice
- Independent Practice

► TRANSFORM

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

► SPARK

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



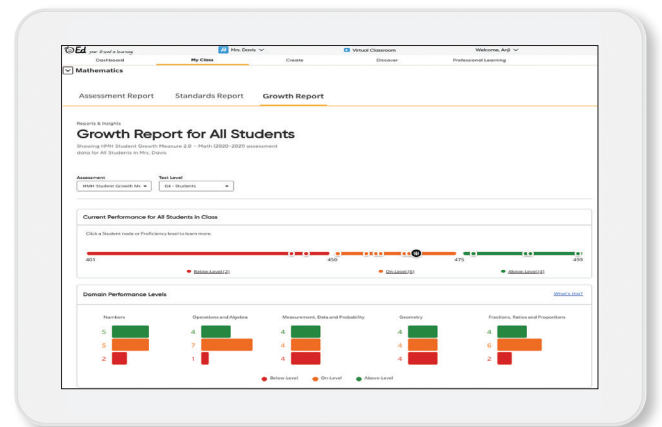
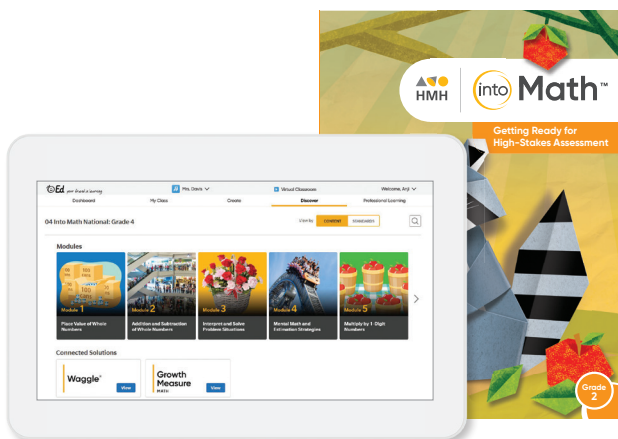


Connect Your Assessment, Instruction, and Professional Learning

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

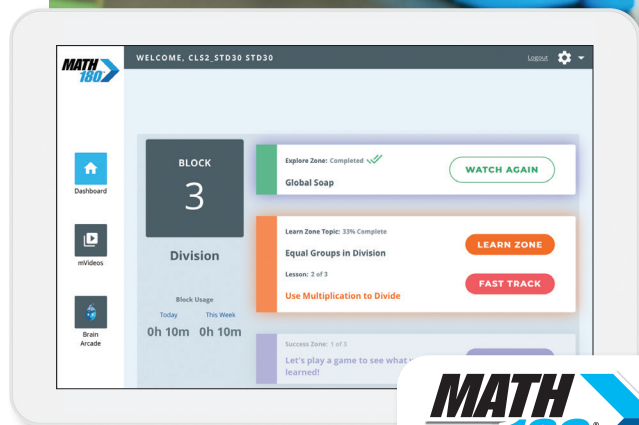


Rich Content and Standards-Based Instruction

- 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!*

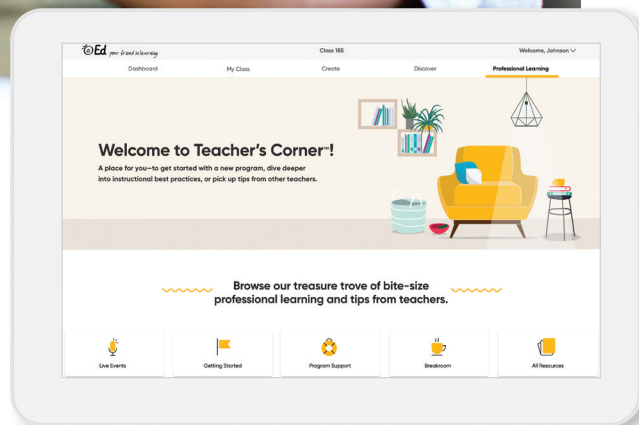
Assessments and Actionable Data Insights

- 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 do to become a better learner?

Learning Mindset

Bounce Back Notices Others

Remind children they can learn from the teacher and also from the other children in the class. *Did you notice classmates who solved a problem differently than you did? Remember, there are many ways you can learn from others. You can listen to a classmate's reasoning, see another's models and drawings, and ask others questions*

Grade 1

Learning Mindset
Perseverance Getting Unstuck

Everyone gets stuck sometimes. You try to solve a maze the way you think it should be done and it doesn't work. So what do you do? Do you try the same way again? Do you know if you haven't followed the directions accurately or if the directions haven't been written clearly? Since getting stuck happens to everyone, it's important to develop ways to get yourself unstuck. Here are a few strategies to help you get unstuck in the STEM Task.

- When writing the directions, move your counter along as you write each step.
- When following directions, work your way backward to see where you made a mistake. You may even decide to start over.

Reflect

Q Describe a time you got stuck drawing your map or writing the directions to get from START to END.

Q What strategies did you use to make sure the directions were clear?

Grade 4

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.

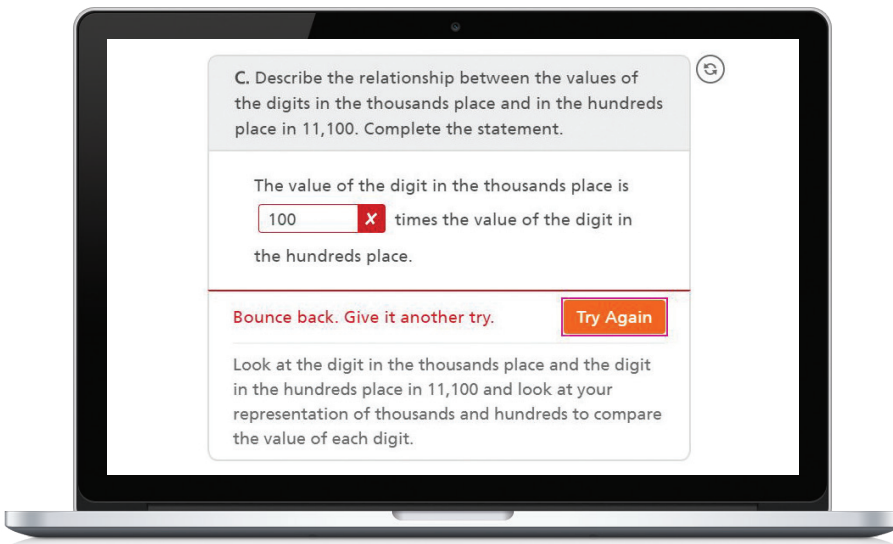


Inspire Students to Understand Their Effort Matters

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?



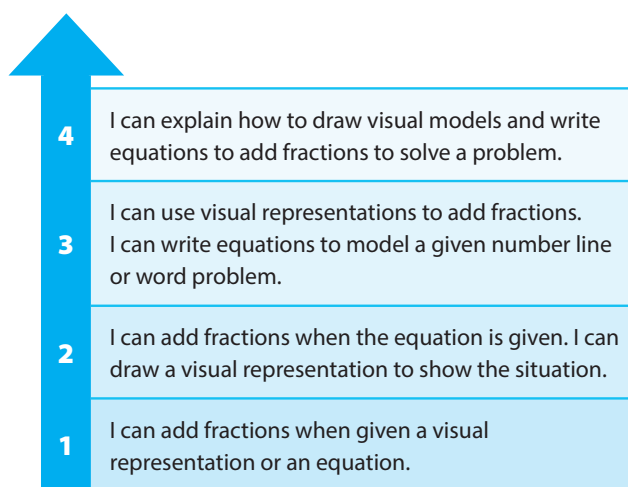
Interactive lessons provide students with meaningful feedback and promote perseverance, using learning aids such as

- 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.



Put It in Writing

Explain the strategies you could use to show $\frac{2}{10} + \frac{4}{10} = \frac{6}{10}$.
Tell which strategy is your favorite and why.

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

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

Exit Ticket

Carlo's family picks 50 oranges and grapefruits. 20 are oranges. How many grapefruits does his family pick? Show how to solve this problem using any method you know.

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 in their Practice and Homework Journal.

A completed chart for the module is shown here.

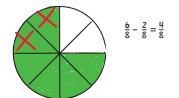
Represent and Model Addition of Fractions

- Break apart fractions into two fractions with like denominators.
- Join two fractions that have the same denominator.



Represent and Model Subtraction of Fractions

- Compare fractions to determine how much more.
- Take away a fraction of a whole from a greater fraction of the same whole.



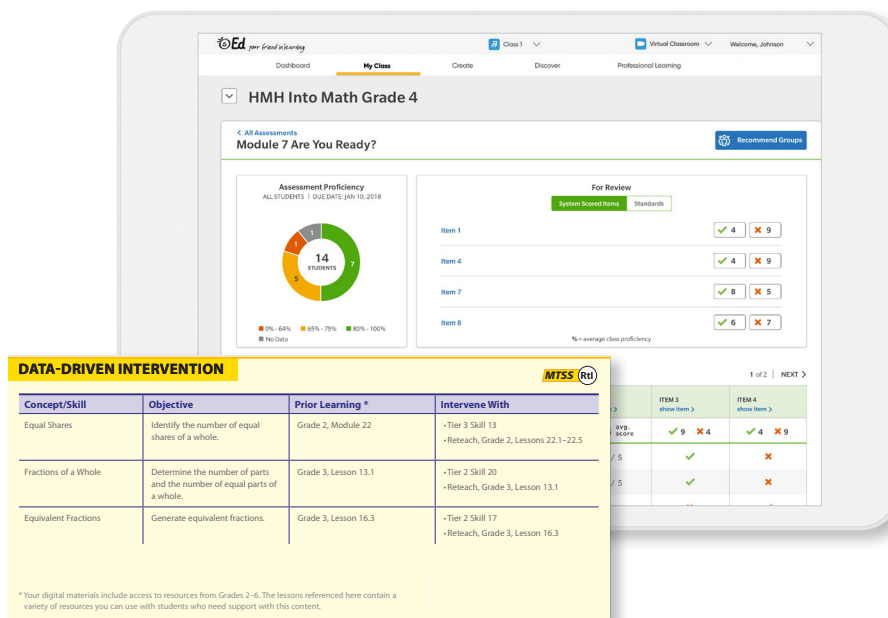
Build **anchor charts** with your class or use the pre made options provided.

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



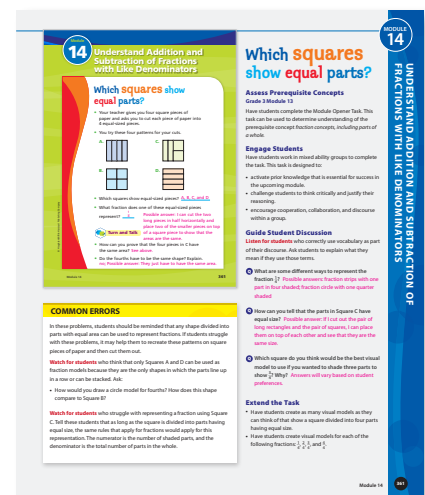
Keep Your Finger on the Pulse of Student Progress

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.

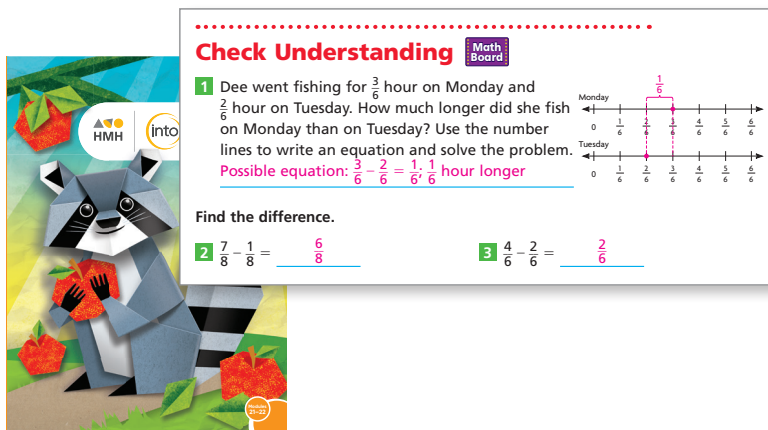


Are You Ready? diagnostic assessments help you pinpoint students' gaps in skills needed for success in the upcoming module. They are available in the Student Edition or as an interactive online assessment.

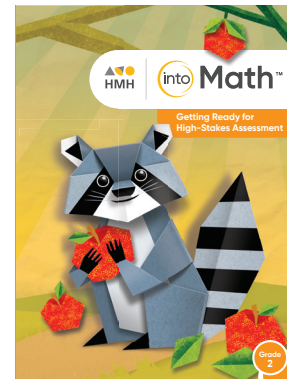
The **Module Opener** embedded within the Student Edition is a game-like diagnostic used to assess concept readiness for the upcoming module.



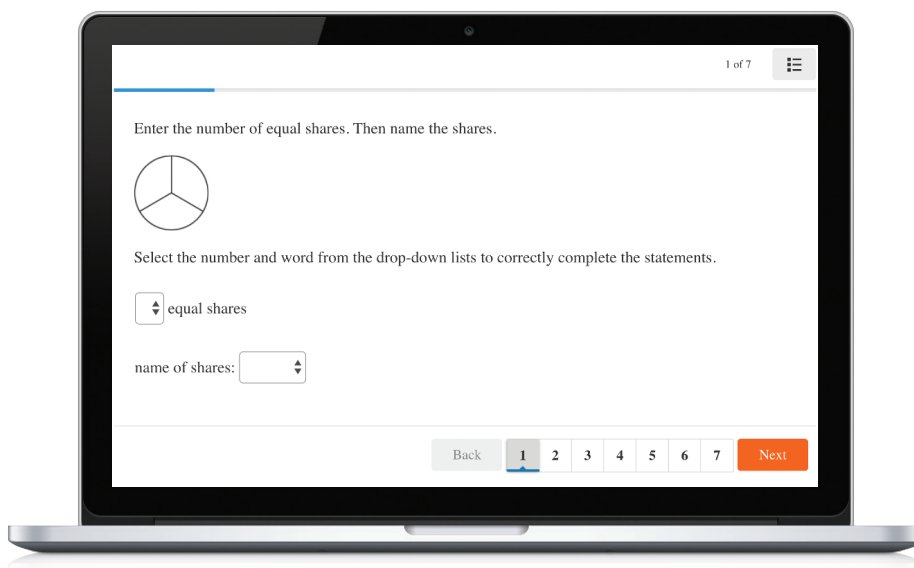
Diagnostic, Summative, and Formative Assessments are easily accessible for teachers and students



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** workbook 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.



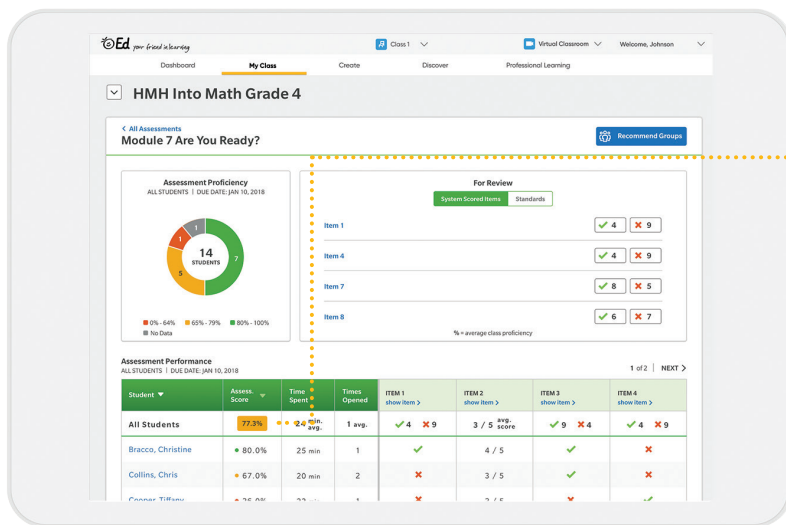
Differentiate Learning and Assemble **Flexible Groups**

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.



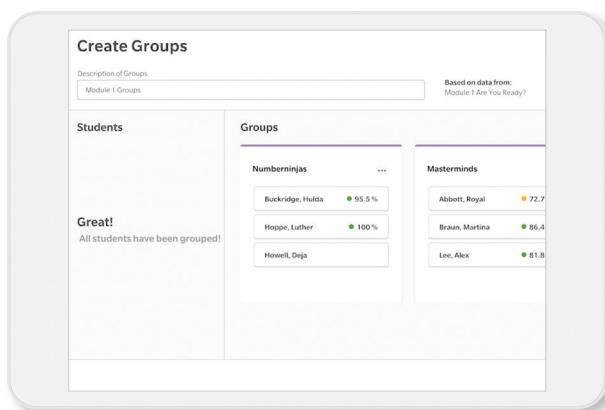
Mr. Baxter receives class and student scores for the Module 7 Are You Ready? Diagnostic Assessment.



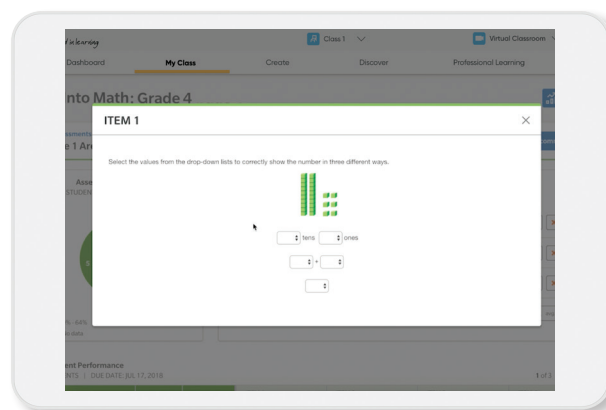


The average test score for the class is 77.3%. Mr. Baxter wants to see which students are ready to be challenged more, which students have mastered the concepts and skills, and which students need more targeted support.

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.



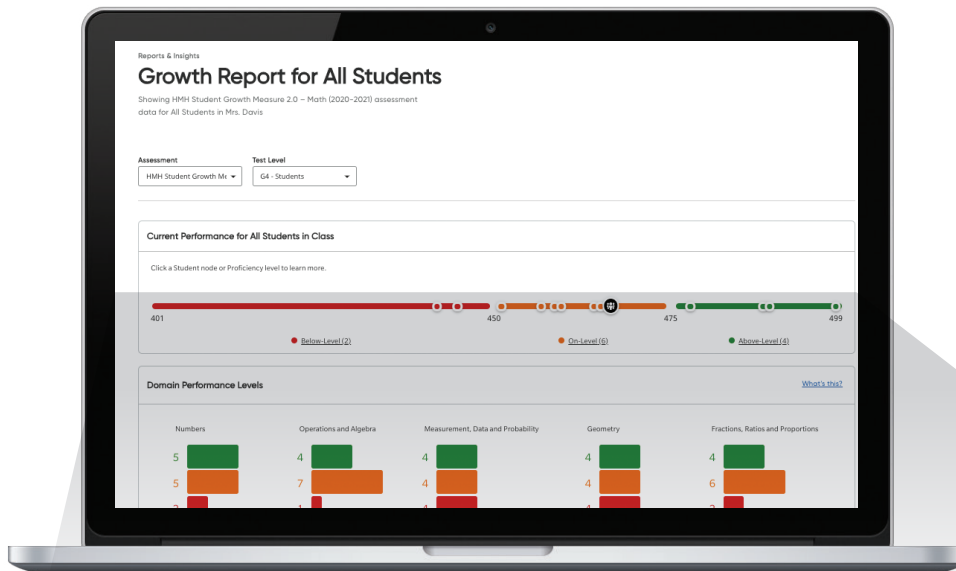
Christine Bracco is a fourth-grade student who has gained 100 Quantile® measures from the beginning to the middle of the year. Her teacher can see her Math Growth Measure data from previous years to track her progress year over year.





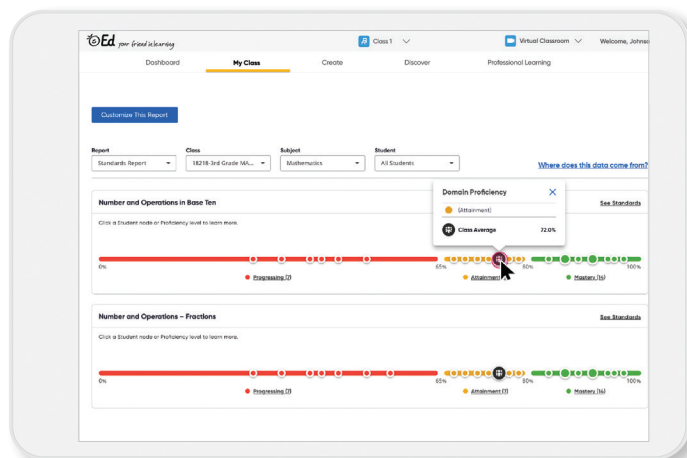
Benchmark assessment data from **HMH Growth Measure** combine with in-program assessment data from *Into Math* in the Standards and Growth Reports to form a more complete picture of a student's knowledge.

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



| STUDENT | DATE SUBMITTED | TIME SPENT | HMH SCALED SCORE | PERFORMANCE LEVEL What's this? | CHANGE FROM PREVIOUS | GRADE LEVEL EQUIVALENCY What's this? | STUDENT GROWTH INDEX | CURRENT QUANTILE INTERVAL |
|-------------------|----------------|------------|------------------|-----------------------------------|----------------------|---|----------------------|---------------------------|
| Annick, Evan | Jan 25 2020 | 22 min | 477 | Above-Level | ↗ 9 | At Grade (1.30) | Exceeded (1.12) | 555-705 |
| Bracco, Christine | Jan 25 2020 | 25 min | 465 | On-Level | ↗ 7 | At Grade (1.10) | Met (0.92) | 520-670 |
| Carrillo, Jose | Jan 25 2020 | 15 min | 445 | Below-Level | ↘ 2 | 1 Grade Below (0.71) | Did not meet (0.86) | 310-460 |
| Cotton, Alex | Jan 25 2020 | 32 min | 450 | On-Level | ↗ 7 | At Grade (0.80) | Met (0.93) | 370-520 |

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





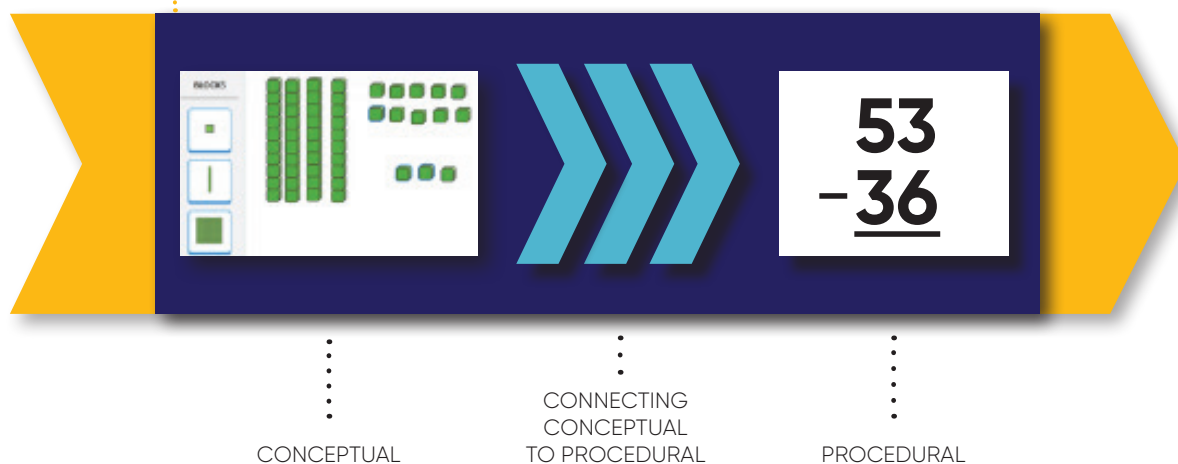
Success You Can Measure and Celebrate

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

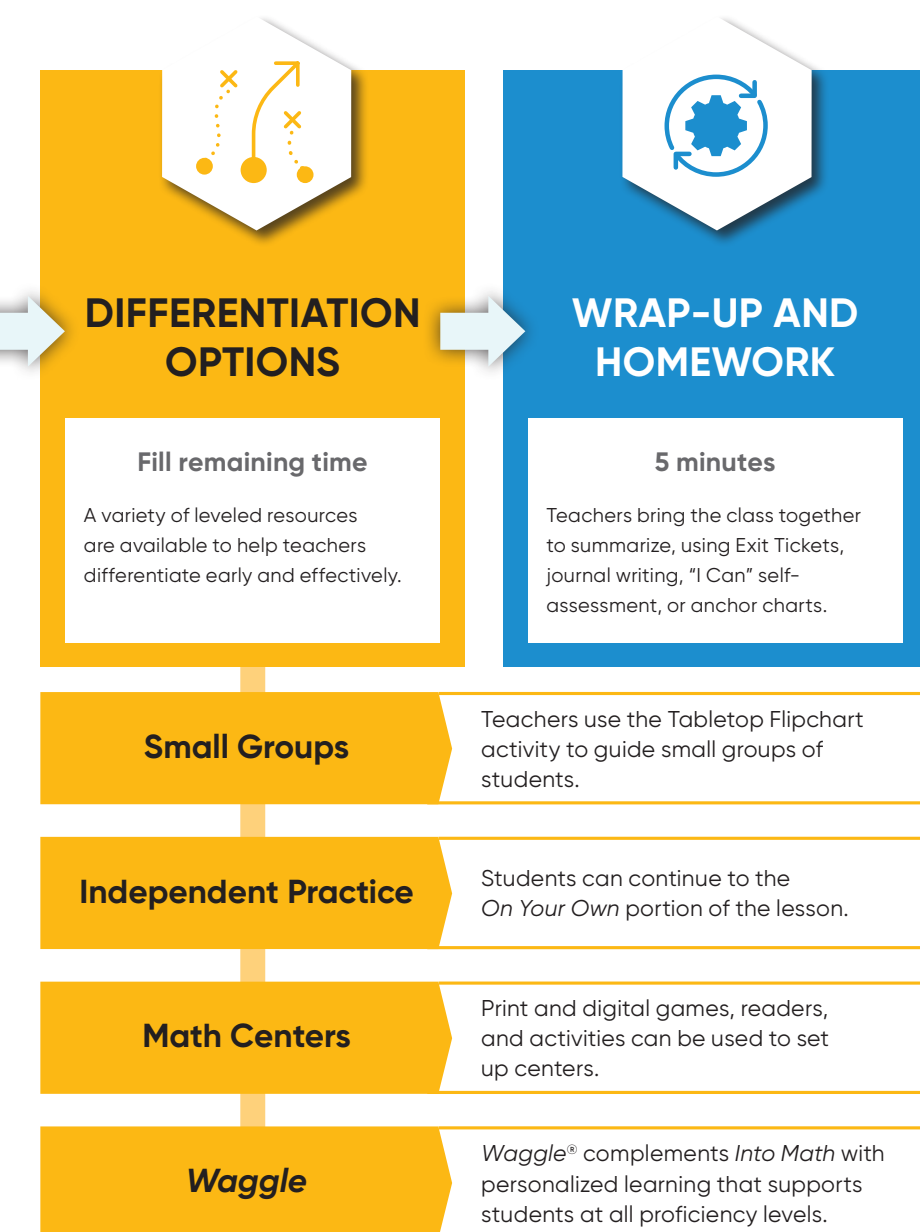
- Analyzing how and why they're using a model or strategy
- Explaining their thinking to their peers
- Making sense of problems in ways that allow easier application to new situations
- Critiquing the thinking of others, constructing viable arguments, and persevering





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.

Spark Your Learning

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

Connect Concepts and Skills
Lesson 5

Name _____

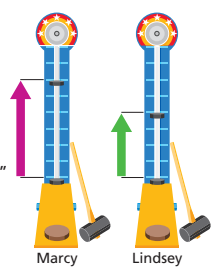
Represent Subtraction of Fractions

I Can write equations and find the difference of fractions with like denominators.


Spark Your Learning

Marcy and Lindsey are playing games at a local carnival. They play the game "Measure Your Strength," and their results are shown. Find how much farther Marcy hits the puck up the board than Lindsey.


Show your thinking.



Marcy Lindsey



Turn and Talk Compare your work with a classmate. Did you get the same answer? Did you use the same method to solve the problem?



SMALL GROUPS

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.



Lesson 5 **Represent Subtraction of Fractions**

Spark Your Learning

Marcy and Lindsey are playing games at a local carnival. They play the game "Measure Your Strength," and their results are shown. Find how much farther Marcy hit the puck up the board than Lindsey.

Show your thinking.

Marcy hit the puck $\frac{6}{8}$ farther up the board than Lindsey.

Possible visual model:

Turn and Talk Compare your work with a classmate. Did you get the same answer? Did you use the same method to solve the problem? Use possible answer at the right.

LESSON 5 **1 Spark Your Learning**

MOTIVATE

Introduce the problem. Ask students: What do you know about carnival games such as "Measure Your Strength"? Students may want to share how math is represented within different carnival games. Tell students to discuss 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** Into how many equal sections is the board divided? What kind of number can represent something divided into equal sections? **a fraction**
- Advancing** How can you decide what fraction to write to represent each girl's result of playing the game? Possible answer: Marcy's puck moved up 6 of the 8 sections. Lindsey's puck moved up 2 of the 8 sections. I could use $\frac{6}{8}$ for Marcy's puck's distance and $\frac{2}{8}$ for Lindsey's puck's distance.
- Advancing - Use Tools** Which tool could you use to solve the problem? Why is this tool more strategic? Students' choices of strategies or tools will vary.

Turn and Talk: For students who struggle with determining an operation, ask them how they would solve the following problem: I have 3 apples and you have 2. How many more apples do I have than you have? Explain that the same thinking can be applied to this problem. Answers will vary.

BUILD SHARED UNDERSTANDING

CONNECT MATH IDEAS, REASONING, AND LANGUAGE Compare and Connect

Select students who have 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.

EL SUPPORT SENSE-MAKING • Three Reads

Tell students to read the problem three times and prompt them with a different question each time.

- What is the situation about?
Possible answer: how much greater was the distance Marcy's puck traveled than Lindsey's puck traveled
- What are the quantities in the situation?
Marcy's puck traveled $\frac{6}{8}$ of the way to the top. Lindsey's puck traveled $\frac{2}{8}$ of the way to the top.
- What are possible mathematical questions that you could ask for the situation?
Possible questions: How can you represent each distance on the number line as a fraction? How can you subtract fractions with like denominators? How can you represent the difference between the distance Marcy's puck traveled and the distance Lindsey's puck traveled?

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 an Equation Strategy 1

$\frac{6}{8} - \frac{2}{8} = \frac{4}{8}$
Marcy hit the puck $\frac{4}{8}$ of the way farther than Lindsey.

Use a Visual Representation Strategy 2

Marcy hit the puck $\frac{4}{8}$ of the way farther than Lindsey.

COMMON ERROR: Misinterpret Fractions

$\frac{6}{8} - \frac{2}{8} = \frac{2}{8}$
Marcy hit the puck 2 marks farther than Lindsey.

If students ... use an equation to represent the difference, then students have a strong grasp of how to convert visual information, such as a vertical fraction strip, into fraction equations that model the situation.

Have these students ... relate to the class how they knew what values to use in the numerator and denominator of the two fractions that represent the two measurements, and then explain how they determined their difference. **Ask:**

- Why is it important that Marcy and Lindsey played the game on the same device in order to compare their results?

If students ... use a visual model such as a fraction circle or a fraction strip to represent the situation, students may have determined the correct answer but may not know how to represent the situation with a subtraction equation.

Activate prior knowledge ... by having these students write an subtraction equation to represent their fraction model. **Ask:**

- How are the parts of the subtraction equation shown in your representation?

If students ... attempt to subtract the fractions but do not express the whole in the difference correctly, they may not understand what a fraction represents in the context of the problem.

Then intervene ... by telling students that the fractions still represent parts of the same whole which was divided into eighths. That is true of the difference as well. The denominator in the answer must reflect this fact. **Ask:**

- What fraction does each segment of the game represent?
- How many additional segments must you go above Lindsey's result in order to reach Marcy's result?
- How can you express the answers to these two questions as fractions?

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.

Spark Your Learning PowerPoint® slides support teachers and students through each Spark Task.





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 1.1–1.5

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

1st Read What is the situation about?

2nd Read What are the quantities in the situation?

3rd Read What are possible mathematical questions that you could ask for the situation?

Stronger and Clearer Each Time Lesson 1.4

Students write their reasoning to a problem, share, explain their reasoning, listen to and respond to feedback, and then write again to refine their reasoning.

Compare and Connect Lessons 1.1, 1.2, and 1.3

Students listen to a partners' solution strategy and then identify, compare, and contrast this mathematical strategy.

Critique, Correct, and Clarify Lesson 1.5

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

2 Learn Together

Build Understanding

Task 1 **MP Attend to Precision** Have children determine the total number of flowers Maya sells. Repeat with the number of flowers Travis sells. Guide children to determining the total number of flowers sold.

Sample Guided Discussion:

- How many bunches of flowers did they sell?
 $7 + 8 = 15$, so they sold 15 bunches of flowers.
- How many tens are there in the number of flowers they sell? How do you know? **Possible answer: 15; I added the numbers of flowers sold: 7 tens plus 8 tens equals 15 tens.**
- How many hundreds are in 150? How many tens? **1; 5**

Turn and Talk Have children share ideas about how the number of flowers will change if 10 more bunches are sold. **The number of hundreds will go up by 1 because 10 more bunches means 10 more tens and 10 tens is 1 hundred.**

EL OPTIMIZE OUTPUT Stronger and Clearer

Have children share their Turn and Talk responses with a partner. Remind children to ask questions of each other that focus on discussing how to use the number of tens to write three-digit numbers. Then, have them refine their answers.

Build Understanding

Mr. Osgood's class is selling flowers. They come in bunches of 10. Maya sells 7 bunches and Travis sells 8 bunches. How many flowers do they sell?

A What do you need to find?
the total number of flowers Maya and Travis sell

B Use a concrete model and draw to solve.
Circle tens to make 1 hundred.

Check children's drawings. Possible drawing is given.

C How can you write the number three ways?
15 tens
1 hundred 5 tens
150

D Solve.
Maya and Travis sell 150 flowers. **See possible answer at the left.**

Turn and Talk How will the number of hundreds be different if 10 more bunches of flowers are sold?
answer at the left.

96 ninety-six

EL OPTIMIZE OUTPUT
Stronger and Clearer


Have children share their Turn and Talk responses with a partner. Remind children to ask questions of each other that focus on discussing how to use the number of tens to write three-digit numbers. Then, have them refine their answers.





More Resources When You Need Them

PLAN FOR DIFFERENTIATED INSTRUCTION MTSS

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

| On Track | Almost There | Ready for More |
|--|---|---|
| Materials: fraction circles Give each pair four copies of the eighths fraction circle. Have them show $\frac{1}{2}$ and $\frac{3}{4}$ on the circles. • Ask them to shuffle the circles. One student takes two of the circles. The student identifies the fractions shown and explains what the sum of the two fractions is. • The two fraction circles are returned to the pile, and the other student takes a turn. • Repeat until each student has had three turns. • If time permits, repeat with tenths, having students make visual models for $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{5}$, and $\frac{4}{5}$. | Materials: fraction strips Use this Tabletop Flipchart Mini-Lesson to guide students in using fraction strips to help them understand how to combine two fractions in order to determine their sum. Students are shown how the parts of the different fractions can be combined because they represent the same whole.  | Materials: fraction strips (tenths), number cube Using fraction strips, have students make visual models of $\frac{1}{10}$, $\frac{2}{10}$, $\frac{3}{10}$, $\frac{4}{10}$, $\frac{5}{10}$, $\frac{6}{10}$, $\frac{7}{10}$, $\frac{8}{10}$, and $\frac{9}{10}$. Place $\frac{1}{10}$ and $\frac{2}{10}$ in one pile, facedown. • A student randomly selects $\frac{1}{10}$, $\frac{2}{10}$, or $\frac{3}{10}$. The student tosses the number cube and then finds the fraction strip that has the number shown as the numerator. For example, if 5 is tossed, the student finds the $\frac{5}{10}$ fraction strip. • The student then identifies the fraction that needs to be added to the lesser fraction to get the greater fraction. • All fraction strips are replaced, and each of the other students takes a turn. |

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

| On Track | Almost There | Ready for More |
|---|--|--|
| • More Practice/Homework 14.2 • Fluency Builder: Addition Level 3 • Poggles MX: Operations, Level 9 • Poggles MX: Real Numbers, Level 17  | • Reteach 14.2 • Interactive Reteach 14.2 • Hit Tier 2 Skill 26: Fractions of a Whole • Reader: A Melody in Fractions  | • Challenge 14.2 • Interactive Challenge 14.2 |

ONLINE Ed View data-driven grouping recommendations and target differentiation resources.
Lesson 14.2 537C

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.

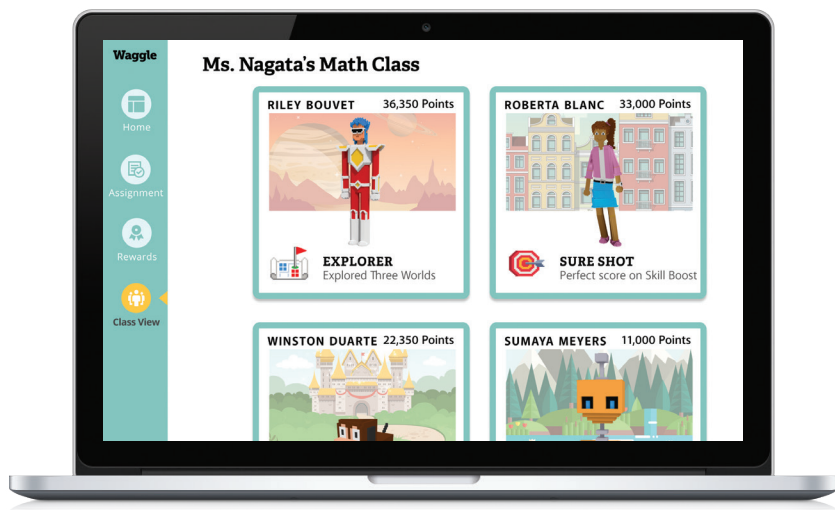
With **Math Readers**, teachers can integrate literature into math instruction to help students build abstract models and strengthen students' reasoning and conceptual understanding.

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.



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.

Unit 1

Concert Calculations

You and your band (your math group!) are about to make it big. You need to play before one million fans to land your next record deal. You have \$300,000 to spend on the tour. How much will the tour cost?

Step 1: Look at the Concert Tour Info Sheet. Find cities that have a total of over 1,000,000 in stadium capacity.

Step 2: Add all the costs for each individual city.

Step 3: Add to find the total cost for all the cities you choose.

Step 4: If the cost is greater than \$300,000, try new combinations of cities until the attendance is high enough and the cost is low enough.

Materials

If you are having a hard time figuring out what cities to choose, try the **Learning Mindset** activity on the back.

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.

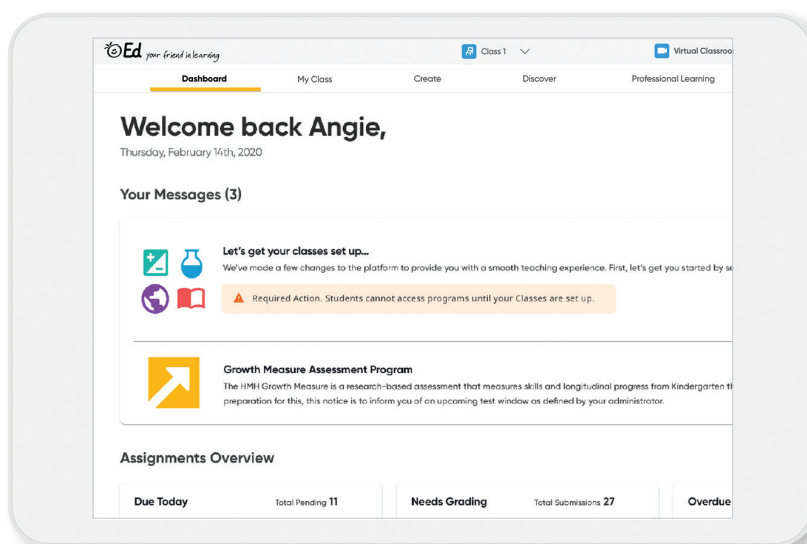


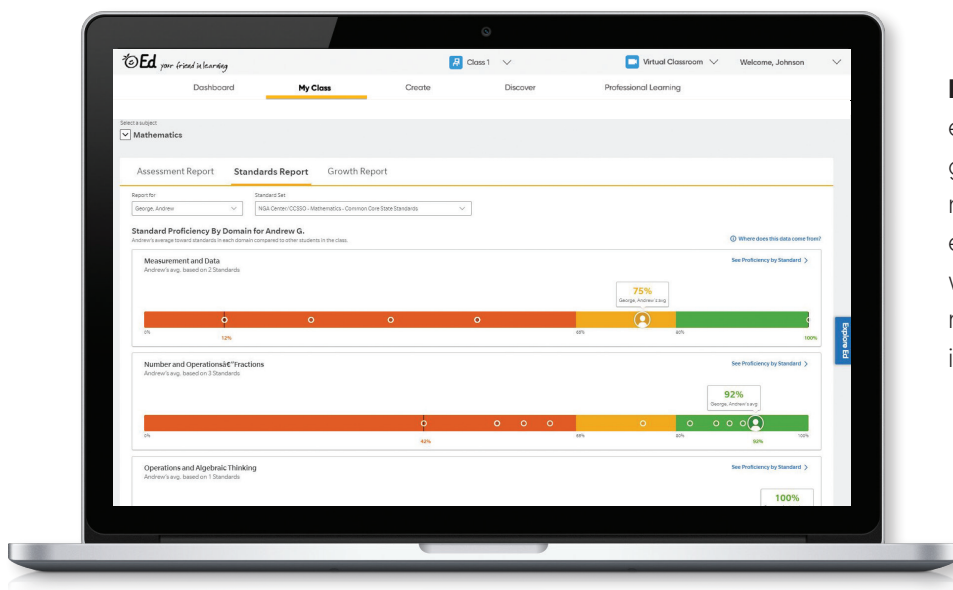
Make the Most of Instructional Time

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.

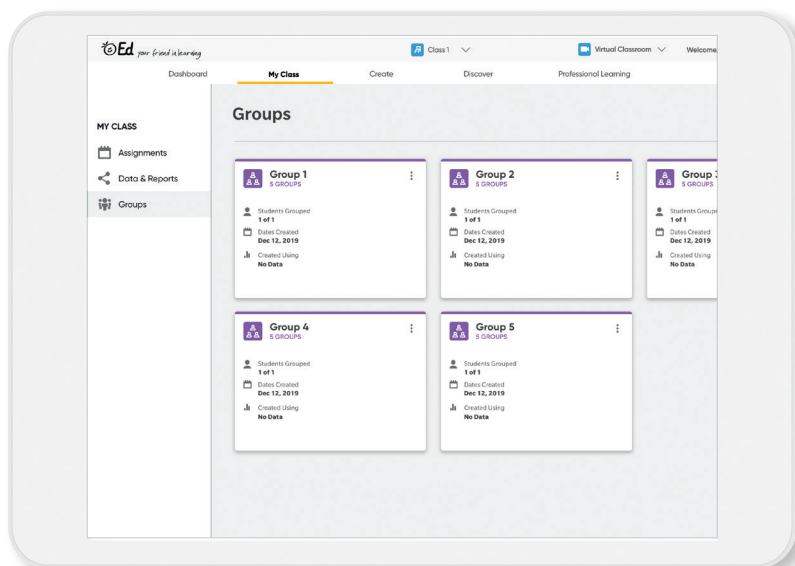
- **Day-to-day planning** is streamlined, ready to use, and customizable.
- **Data collection** is automated and easy to access and interpret.
- **Differentiation strategies and resources** are targeted, clear, and easily implemented.
- **Professional learning** support is embedded throughout every lesson 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.

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

Measure math skills and longitudinal progress.

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

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


| Planning and Pacing Guide | | |
|--|---|--------|
| <div> <div> ■ Build Understanding </div> <div> ■ Connect Concept and Skill </div> <div> ■ Apply and Practice </div> </div> | | |
| Lesson and Pacing | Mathematics Standards, Grade 4 | Pacing |
| UNIT 1: PLACE VALUE AND WHOLE-NUMBER OPERATIONS | | |
| Module 1: Place Value of Whole Numbers | | |
| Lesson 1.1: Understand Place Value Relationships | <ul style="list-style-type: none"> Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. | 2 days |
| Lesson 1.2: Read and Write Numbers | <ul style="list-style-type: none"> Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. | 1 day |
| Lesson 1.3: Regroup and Rename Numbers | <ul style="list-style-type: none"> Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. | 1 day |
| Lesson 1.4: Compare and Order Numbers | <ul style="list-style-type: none"> Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. | 1 day |
| Lesson 1.5: Use Place Value Understanding to Round Numbers | <ul style="list-style-type: none"> Use place value to round multi-digit whole numbers to any place. | 1 day |
| Module 2: Addition and Subtraction of Whole Numbers | | |
| Lesson 2.1: Add Whole Numbers and Assess Reasonableness | <ul style="list-style-type: none"> Fluently add and subtract multi-digit whole numbers using the standard algorithm. | 1 day |
| Lesson 2.2: Subtract Whole Numbers and Assess Reasonableness | <ul style="list-style-type: none"> Fluently add and subtract multi-digit whole numbers using the standard algorithm. | 1 day |
| Lesson 2.3: Use Addition and Subtraction to Solve Comparison Problems | <ul style="list-style-type: none"> Fluently add and subtract multi-digit whole numbers using the standard algorithm. | 1 day |
| Lesson 2.4: Apply the Perimeter Formula for Rectangles | <ul style="list-style-type: none"> Apply the area and perimeter formulas for rectangles in real world and mathematical problems. | 1 day |
| UNIT 2: MULTIPLICATION AND DIVISION PROBLEMS | | |
| Module 3: Interpret and Solve Problem Situations | | |
| Lesson 3.1: Explore Multiplicative Comparisons | <ul style="list-style-type: none"> Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. | 1 day |
| <div> <div> ■ Major </div> <div> ■ Supporting </div> <div> ■ Additional </div> </div> <p>In addition to the core instructional pacing, HMH recommends the following:</p> <ul style="list-style-type: none"> • 1 day per year for the Number Sense assessment. • 2 days per module for the Module Overview, the Review, and Module Test. • 1 day per unit for the Performance Task. <p>Using these recommendations, the total pacing for Grade 4 is 170 days.</p> | | |
| Module 4: Mental Math and Estimation Strategies | | |
| Lesson 4.1: Explore Multiplication Patterns with Tens, Hundreds, and Thousands | <ul style="list-style-type: none"> Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | 1 day |
| Lesson 4.2: Explore Division Patterns with Tens, Hundreds, and Thousands | <ul style="list-style-type: none"> Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | 1 day |
| Lesson 3: Estimate Products by 1-Digit Numbers | <ul style="list-style-type: none"> Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | 1 day |

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.

1 of 7

Enter the number of equal shares. Then name the shares.



Select the number and word from the drop-down lists to correctly complete the statements.

equal shares

name of shares:

Data-Driven Intervention

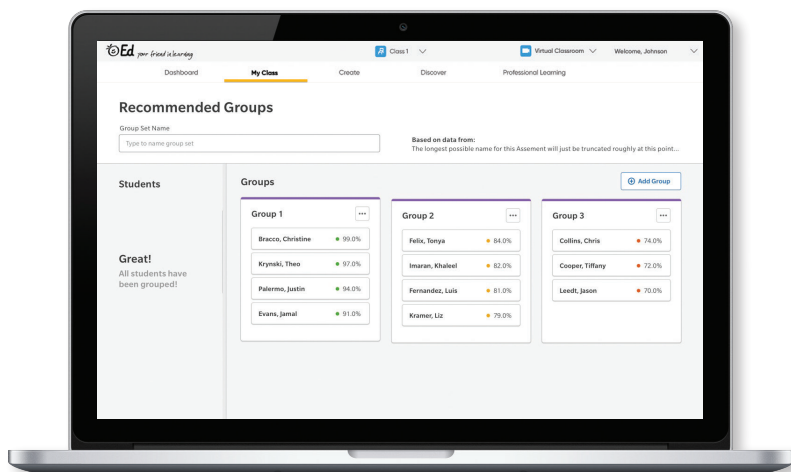
Broken down by concept and skill, **Data-Driven Intervention** call-outs take the guesswork out of closing learning gaps before they take hold.



Actionable Data to Create **Exceptional Lessons**

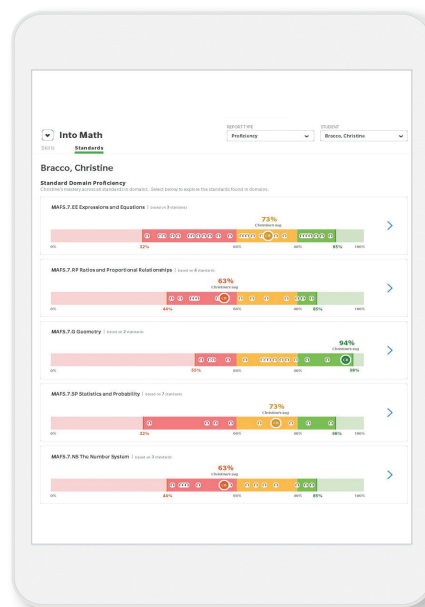
Get a clear picture of where students are on their learning journey with actionable data that are valid and reliable. Comprehensive, real-time assessment data and interactive reports allow you to view your students' strengths and weaknesses as you plan for the resources they'll need.





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

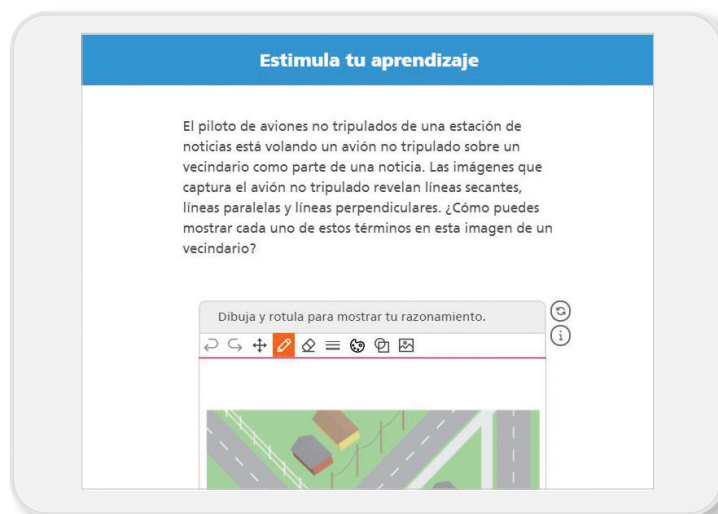
Teachers, who know their students best, can quickly adjust groups with a simple drag-and-drop feature.



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.





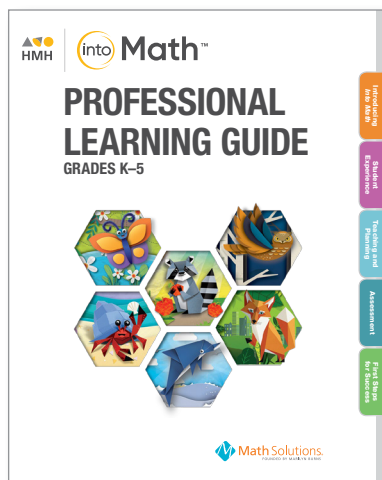
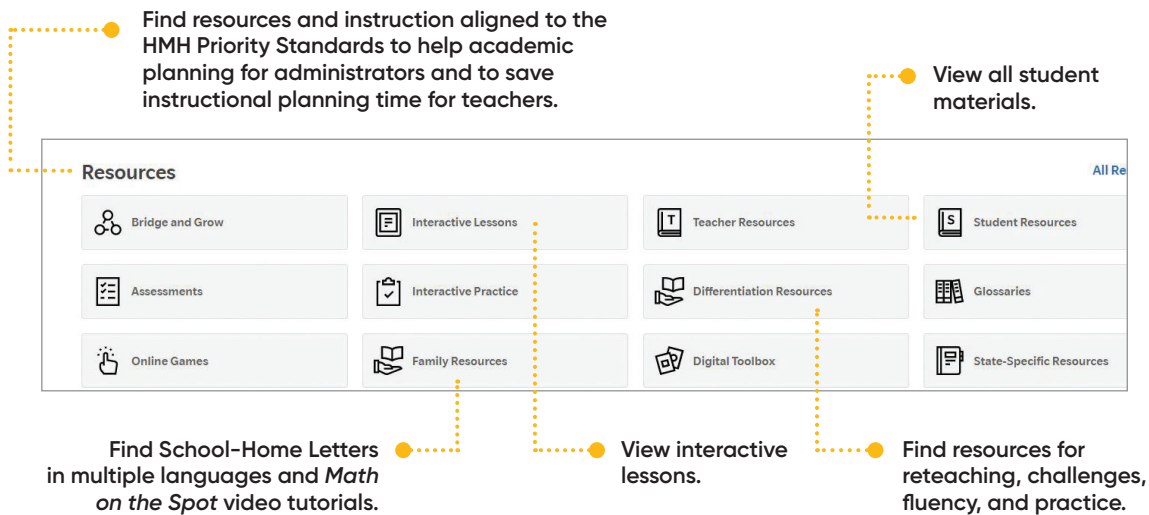
Continuous Support at **Your Fingertips**

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.



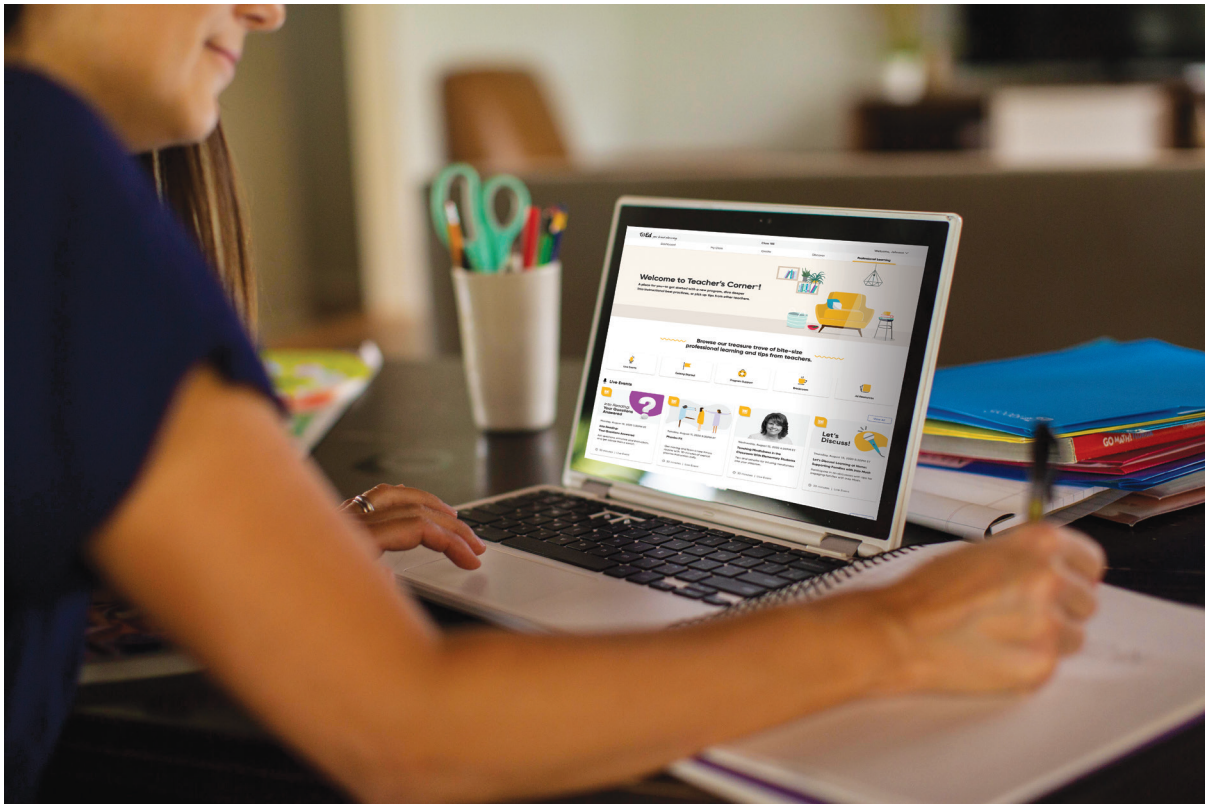
Follow-Up Training Tailored To Your Needs: Once you begin teaching, you'll have more questions and need more support. That's why we provide additional opportunities for you to connect with a Math Solutions coach throughout the year.

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

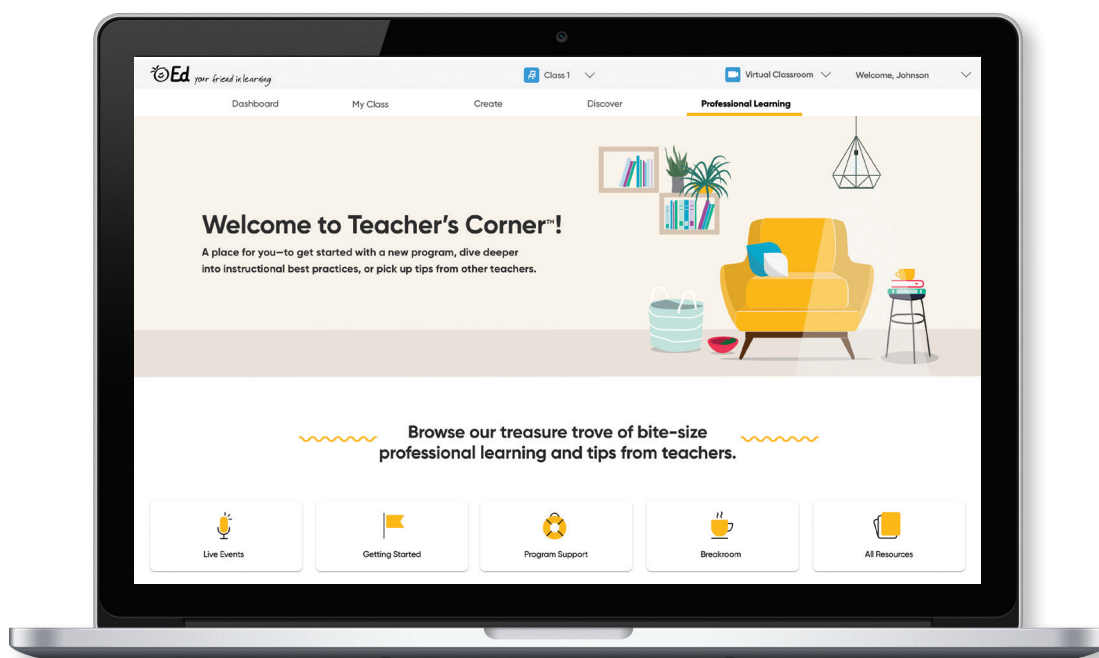
Getting help or refining your practices isn't limited to scheduled trainings or coaching. With Teacher's Corner™, you have access to on-demand professional learning and teaching support via Ed anytime, anywhere.



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.

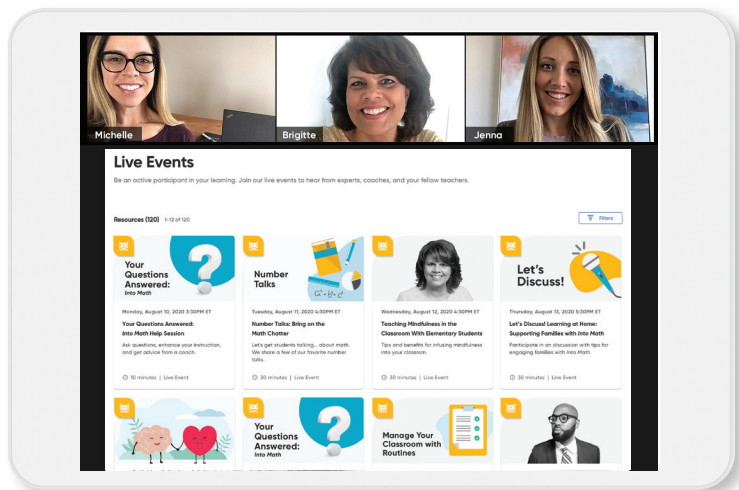


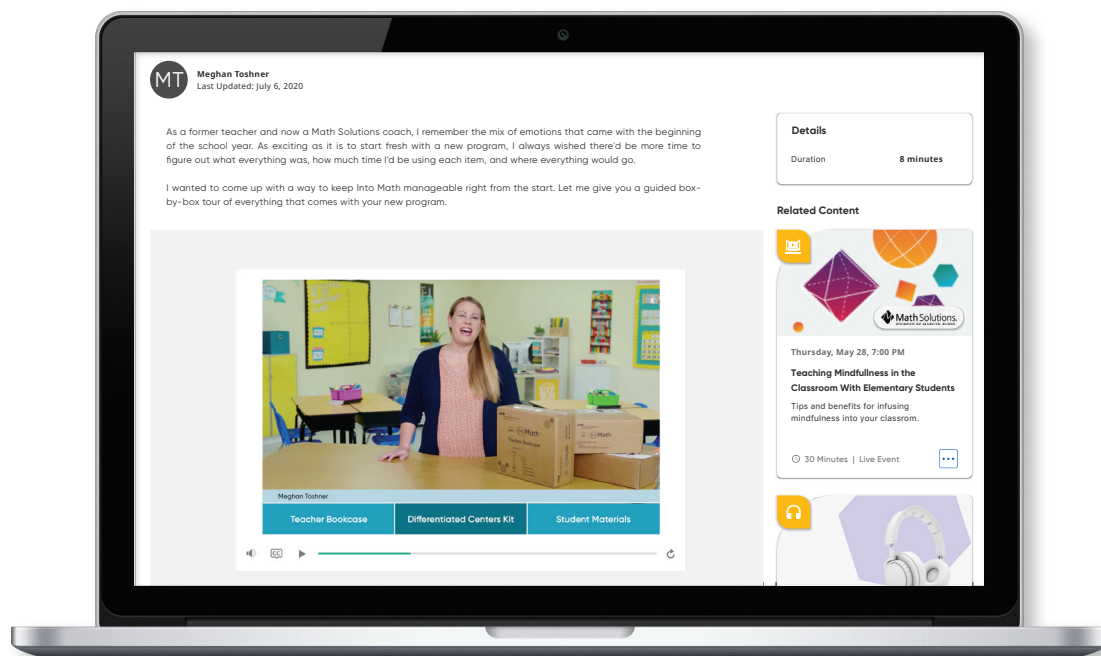
Professional Learning Videos

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

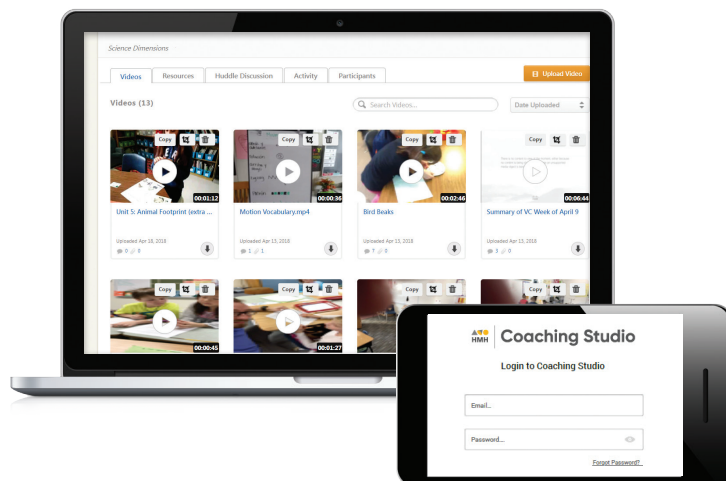
Whether you are interested in focusing on instructional best practices, deepening your content knowledge at each grade level, or closing the achievement gap, Math Solutions can provide the support you need to grow your practice with online coaching, courses, and professional learning communities.

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.



//CODiE//
2019 SIIA CODiE FINALIST



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*!



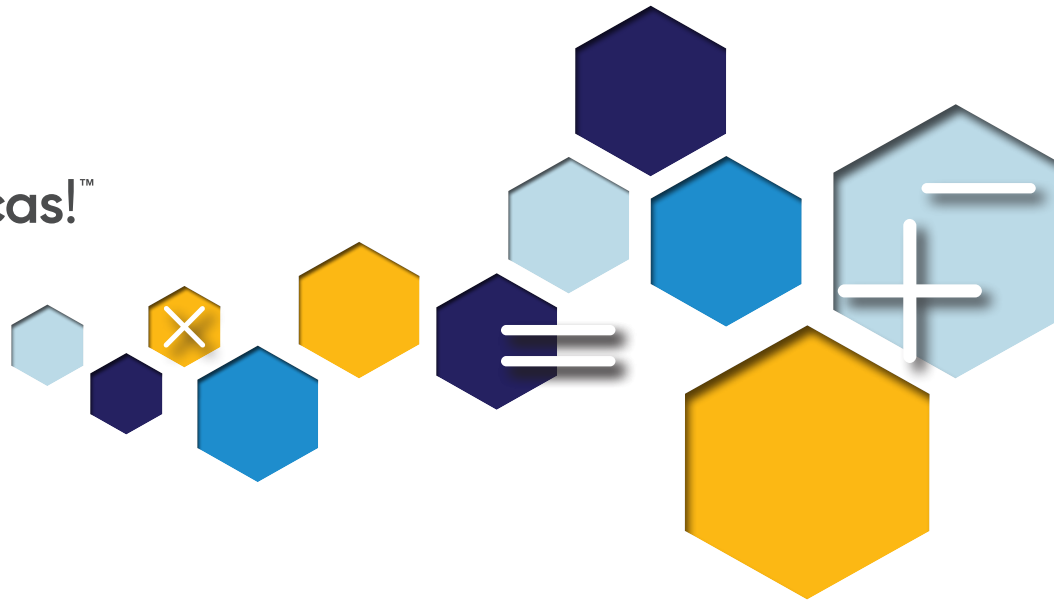




into Math®



¡Arriba las Matemáticas!™



A Vision for **Student Growth**

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

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