magma

ASSESSMENT GUIDE

Using Assessment Data to Guide Instruction

How Magma Math supports formative, summative, and diagnostic assessment in daily instruction

A Flexible Assessment Tool

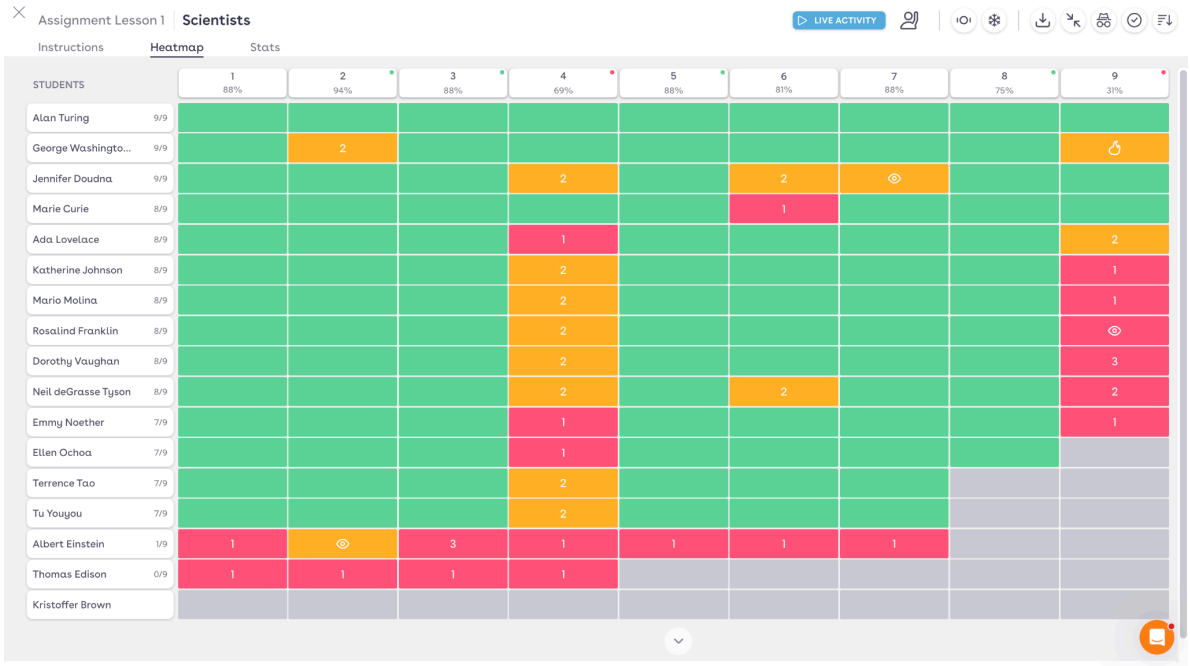
Magma Math can be used for entry tickets, checks for understanding, exit tickets, end-of-unit assessments, and screeners. When creating their assignment, educators have access to the full problem bank spanning K-12 and can mix and match standards from different topics. Problems are available at three difficulty levels, and assignment settings such as Quiz Mode, attempt limits, hints, and calculator access let you shape each assignment to fit your purpose and your students. Across all of these, one thing stays constant: students show their work on the open canvas. You always see their thinking, not just their answer.

Assignment creation view showing three difficulty levels (mild, medium, spicy) that let educators select problems that match the needs of their students

Real-Time Assessment Data

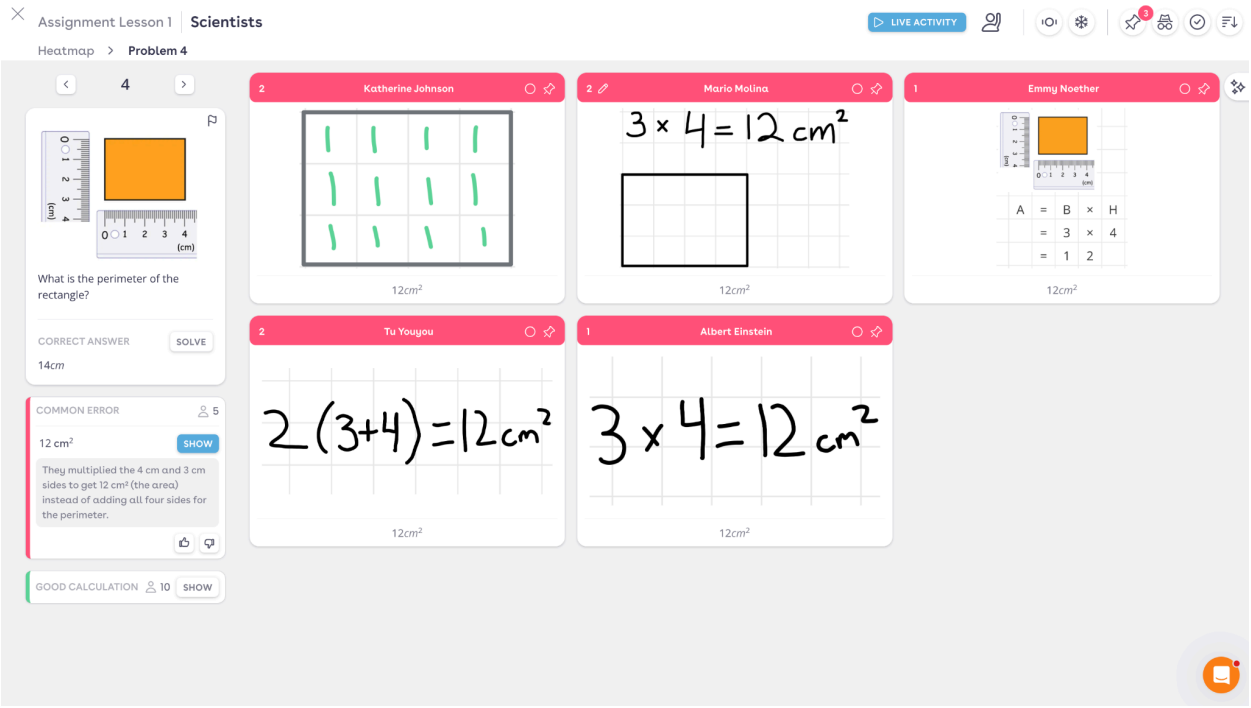
As students work, Magma grades each response in real time. Students receive immediate feedback on whether they are on the right track, and their results update live in your **Heatmap**—revealing emerging patterns and trends across your classroom. The Heatmap shows you color-coded progress for each student, how many attempts they have made on each problem, and whether they needed hints. This gives you the

information to identify who needs support and where to focus your attention, right when that support is most useful.



Heatmap showing real-time class overview with color-coded progress, attempt counts, and answer checking indicators (eye symbol)

To look more closely at student work, click on any problem to open the **Solutions View**. Here you can walk through an individual student's reasoning step by step and see exactly where their thinking breaks down or where they found a strong approach. The **Common Error Detector** works alongside this by scanning across the class and flagging errors that multiple students are making—helping you catch misconceptions as they surface so you can address them before they become ingrained.



Solutions View showing a student's work alongside the Common Error Detector flagging a shared misconception

Formative Assessment

Formative assessment is assessment used during instruction to identify misconceptions, gauge progress, and guide your next instructional move. Because the Heatmap, Solutions View, and Common Error Detector all update as students work, every Magma Math assignment can serve as a formative assessment. Here are some of the ways educators typically apply this in their classrooms:

Warm-Ups and Exit Tickets

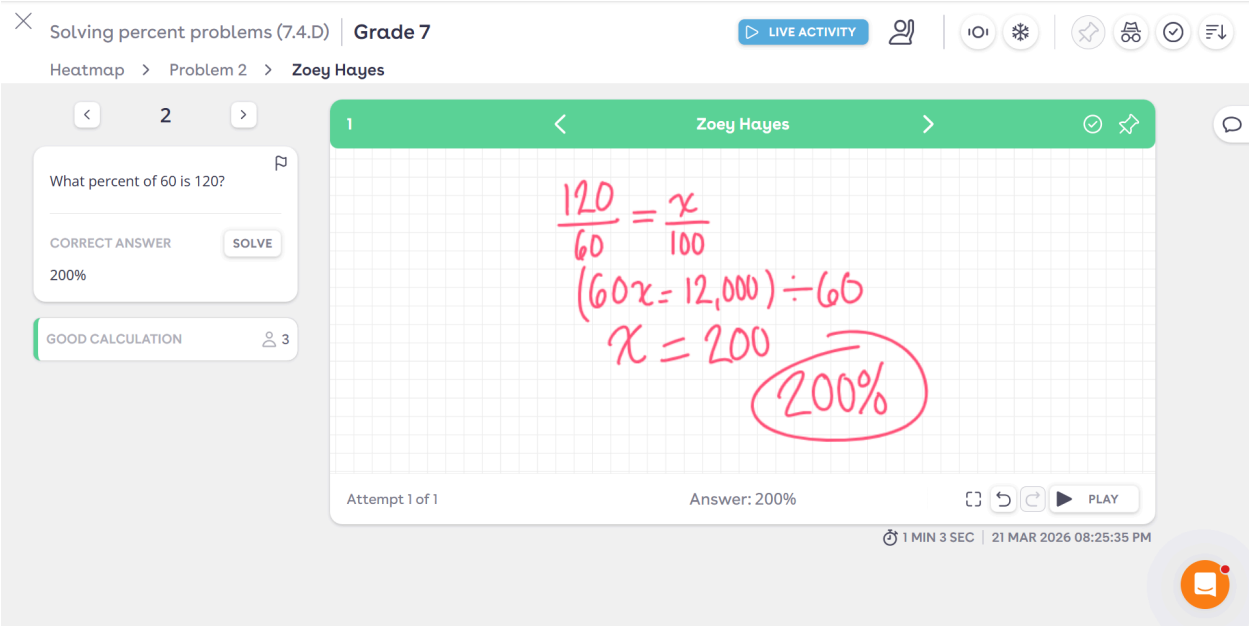
A quick check at the start or end of class can set the tone for a lesson or tell you what to prioritize next. Assign 1–3 problems to check for prior knowledge, activate a concept, or capture what students retained from the day's instruction. The Heatmap gives you a read on where the class stands, and the results carry forward to inform your planning for the next day.

Checks for Understanding

When you want to gauge whether students are making sense of a concept during instruction, assign around 10 problems of varying difficulty to see where their understanding is at. Monitor the Heatmap and Solutions View as they work. If the Common Error Detector flags a misconception that is showing up across the class, you can pause and address it as a whole group. If only a few students are off track, pull them for targeted support while the rest continue.

Think-Pair-Share

As you review student work in the Solutions View, you will notice solutions that represent a particular strategy or reveal a misconception worth discussing. You can surface that solution to the class and ask students to talk with a partner about what they notice, what makes sense, and what they would do differently. As students become more comfortable viewing and discussing each other's work, you can take it a step further by pinning multiple solutions and using **Playback** to compare strategies side by side as a whole-class conversation.



Student solution in Playback mode, showing a step-by-step replay of the student's work process on the canvas.

Spiral Review

When creating an assignment, you can mix and match problems from different standards and topics into a single set. This enables you to revisit concepts throughout the year and monitor whether students are retaining what they have learned across units.

Summative Assessment

Summative assessment evaluates what students have learned at the end of an instructional period—a unit, a grading cycle, or a semester. When you need a more formal measure of what students know, **Quiz Mode** removes immediate feedback and hints and grades student responses in the background. Students still show their work on the canvas, but results are held for you to review and release when you are ready. The **Stats Tab** breaks results down by TEKS standard, giving you a clear picture of which

standards each student has mastered and where gaps remain. Use this data to identify areas for reteaching, plan reassessment, or differentiate your next unit.

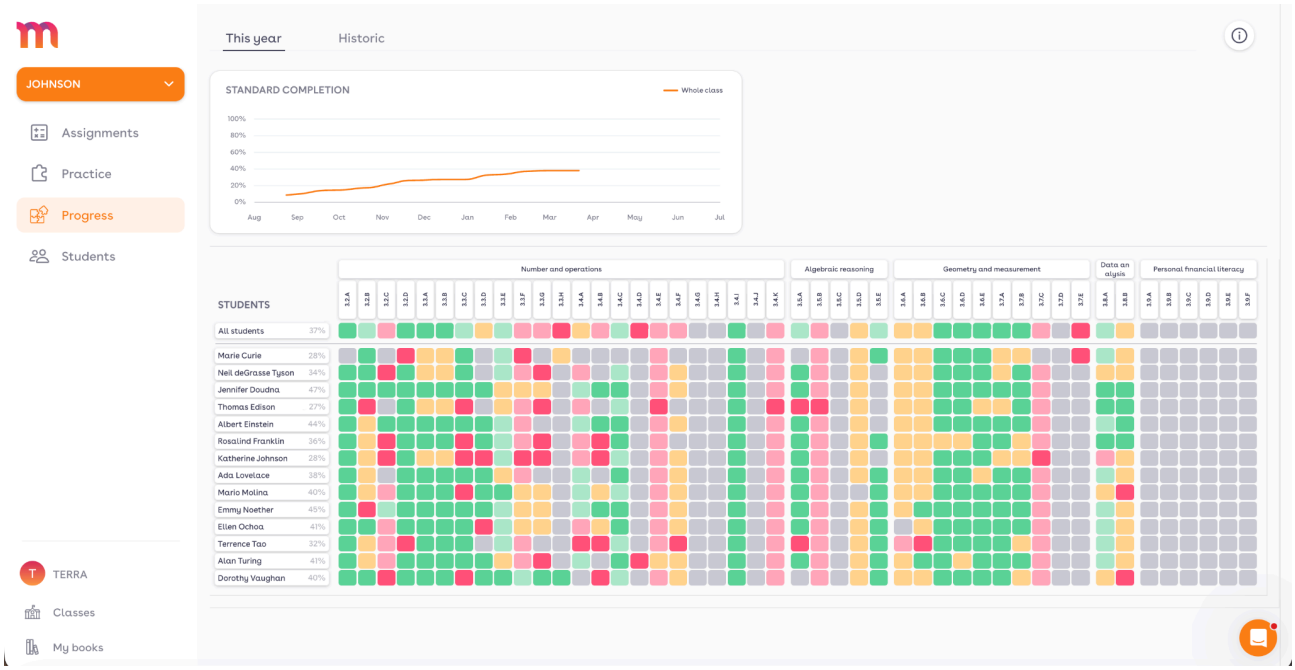
Quiz Mode and the Stats Tab showing mastery by TEKS standard

Diagnostic Assessment

Diagnostic assessment establishes what students know before instruction begins. It gives you baseline data on foundational skills so you can adjust your pacing and plan targeted support from the start. Magma Math includes built-in **screeners** aligned to prerequisite TEKS standards that you can assign at the beginning of the year or before a new unit. You can also build your own diagnostic by selecting problems across the standards you want to assess. Run these in Quiz Mode and use the Stats Tab to see exactly which prerequisite skills each student has and where the gaps are.

Tracking Progress Over Time

Individual assignments tell you how students are doing right now. The **Progress Tab** gives you the longer view—tracking performance across assignments over time so you can see how each student is developing, identify who may need additional support, and bring concrete data into progress conversations with families and colleagues.



Progress Tab showing student performance trends over time