



LESSON COMPANION GUIDE

Planning and Delivering Lessons with Magma Math

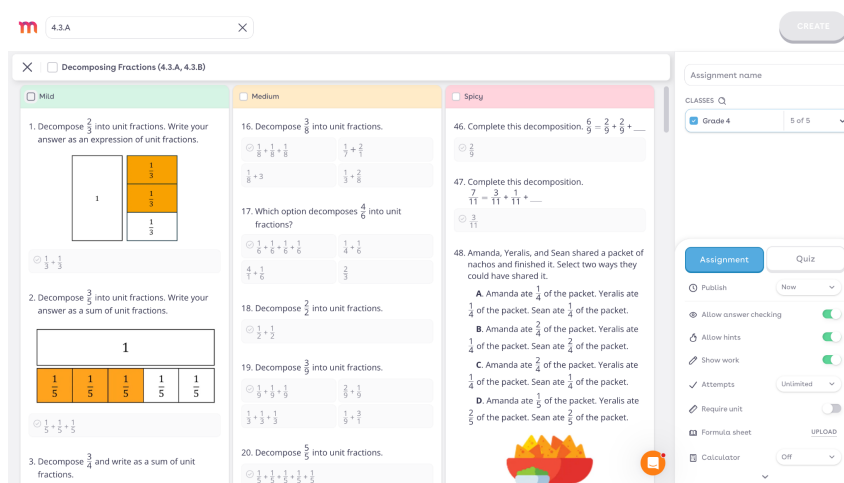
Setting TEKS- and ELPS-aligned objectives, structuring lesson components, and using assessment data to guide instruction

Planning Your Lesson

Setting a TEKS-Aligned Objective

Every lesson begins with a clear learning target tied to the TEKS. Magma Math's problem library is indexed by TEKS standard and grade level, so you can filter directly to problems aligned with your objective.

- **Identify your standard** and write a student-facing objective tied to that standard.
- **Build your assignment.** Filter by your target standard in the Teacher Dashboard and select problems at the difficulty level that matches your students' readiness.
- **State the objective aloud** before launching the assignment, so students can self-monitor their learning.



Teacher Dashboard showing Filters panel with TEKS standards and difficulty levels

Supporting ELPS Across All Four Domains

Magma Math gives EB students ways to engage with grade-level mathematics across all four ELPS language domains—in their home language and in English:

- **Listening.** Text-to-speech (40+ languages) lets students hear problems read aloud in their preferred language. Class discussions around pinned student solutions

create structured listening opportunities where students hear peers use mathematical vocabulary in context.

- **Speaking.** Voice recording lets students explain their reasoning orally—in their home language or in English. The Discuss step gives students opportunities to narrate their strategy, respond to questions, and justify their thinking to the class.
- **Reading.** Translation (140+ languages) lets students read problems in their preferred language while working on the same grade-level content. As proficiency grows, students toggle between languages and use the visual context on the canvas to support comprehension in English.
- **Writing.** Students annotate drawings, label diagrams, and write explanations directly on the canvas—in their home language or English. Over time, annotations progress from single words to full sentences using content-area vocabulary.

When planning your language objective alongside your TEKS objective, identify which domains the lesson will emphasize and which Magma tools will support access.

The screenshot shows the Magma Math interface. On the left, a sidebar displays a problem titled "Simplifying linear expressions (6.7.C)" with a visual representation of the expression $2x + 4 + x$ using blocks (two x blocks, four 1 blocks, and one x block). Below the blocks, it says "Simplify the expression by combining like terms." and shows the expression $2x + 4 + x$. The main canvas is a grid where a student has drawn. The student has drawn three vertical bars labeled x , four small squares labeled 1 , and another vertical bar labeled x . Below this, they have written $11 /$ and $3x$. To the right, they have circled the expression $3x + 4$. At the top right of the canvas, there are icons for drawing tools (pencil, eraser, highlighter) and a toolbar with icons for translation, text-to-speech, voice recording, and other tools. At the bottom right, there is an "Answer" box containing $3x + 4$ and a "SUBMIT" button.

Student canvas showing translation toggle, text-to-speech, and voice recording options

Lesson Components and Suggested Timeframes

Structure your lesson around five components. Adjust the timeframes to fit your class and pacing.

Step	Time	What You Do
1. Set the Objective	5 min	Name the TEKS-aligned focus and the ELPS support strategy (translation, text-to-speech, voice recording).

2. Launch	10–15 min	Assign the problem set. Monitor the Heatmap as students work—green (mastery), orange (progressing), red (misconception).
3. Monitor and Respond	10–15 min	Use the Heatmap to identify trends and the Solutions View to examine where misconceptions are coming from. Use the Common Error Detector to see patterns across the class. Respond with a whole-class reteach, small-group support, or enrichment based on what you find.
4. Discuss	10–15 min	Pin anonymized student solutions and use Playback to walk through selected strategies live. Drive math discourse: “What do these approaches have in common? How are they different?” This step supports ELPS listening and speaking as students hear, respond to, and explain mathematical reasoning.
5. Track and Plan	5–10 min	Review progress by standard in the Progress Tab. Assign follow-up practice to specific students or move forward based on evidence.

Surfacing the CRA Progression Through Student Work

On the open canvas, students naturally use a mix of **concrete** (manipulatives), **representational** (drawings, diagrams), and **abstract** (equations, numerical solutions) approaches—often within the same assignment. Your role is to notice that range, surface it, and use it to deepen understanding.

As you monitor, look for students who are modeling with base-ten blocks, students who are sketching area models or number lines, and students who are writing equations. Pin a selection of these solutions—anonymized—and use Playback to walk through them with the class. Ask: “What do these strategies have in common? How are they different? Which one helps you see why this works?” This exposes all students to multiple representations and builds the conceptual connections between concrete, representational, and abstract reasoning.

The screenshot shows the Magma Math interface for a problem titled "Simplifying linear expressions (6.7.C) | Grade 6". The problem is "Simplify the expression by combining like terms. $2x + 4 + x$ ". The interface displays four pinned student solutions:

- Student 1:** Concrete approach using base-ten blocks. The blocks are arranged to represent $2x + 4 + x$, which simplifies to $3x + 4$.
- Student 3:** Representational approach using a drawing of a rectangle divided into sections. The drawing shows the expression $2x + 4 + x$ and the simplified expression $3x + 4$.
- Student 4:** Abstract approach using the equation $2x + x = 3x$, with $3x + 4$ circled.
- Student 5:** Abstract approach using the equation $2x + x = 3x$, with $3x + 4$ circled.

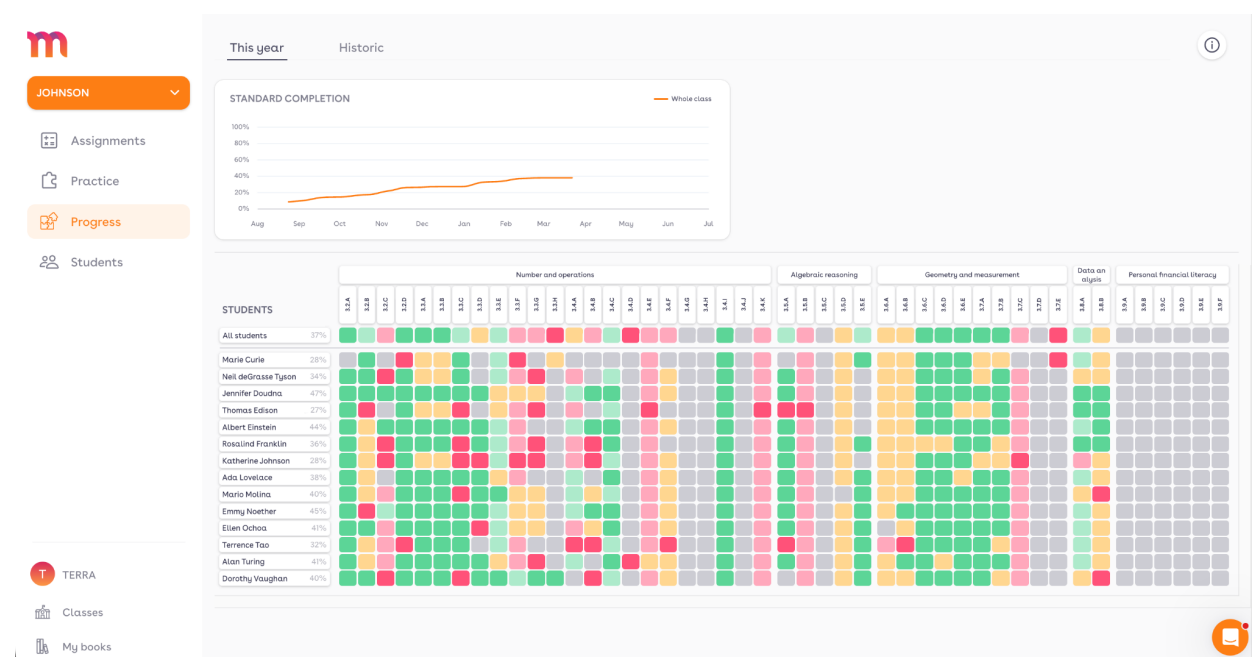
Pinned anonymized student solutions showing concrete (manipulatives), representational (drawing), and abstract (equation) approaches to the same problem

Assessment and Progress Tracking

TEKS-Aligned Assessment

Every assignment in Magma Math produces assessment evidence aligned to your target TEKS standards. During the lesson, the Heatmap, Solutions View, and Common Error Detector give you real-time formative data. For summative snapshots, use **Quiz Mode**, which removes immediate feedback and hints and grades responses in the background for you to review and release when you are ready. Use grade-level **screeners** at the start of the year to identify which prerequisite standards students have mastered and where to build in review.

The **Progress Tab** tracks student performance by TEKS standard across assignments and over time. Use it to monitor growth, identify students who need additional support, and inform progress reporting to families.



Progress Tab showing student mastery by TEKS standard over time

ELPS-Aligned Assessment

Because Magma Math captures student work across all four language domains, you can track ELPS growth over time without separate assessments. Review voice recordings, canvas annotations, translation usage patterns, and participation in class discourse to see how each student's language proficiency is developing alongside their mathematical understanding. Use both when setting goals and reporting to families.

TEKS | Soccer class

Heatmap > Problem 5 > Student 6

LIVE ACTIVITY

2

Student 6

Transcriptions



A parking garage goes beneath the ground for several floors. The ground level is 2 meters above mean sea level. Basement 1 is the floor below the ground level and is 3 meters below mean sea level. The distance between any two floors is the same. How many meters below mean sea level is Basement 3?

CORRECT ANSWER

SOLVE

13m

Un estacionamiento subterráneo se extiende bajo tierra por varios pisos. El nivel del suelo está a 2 metros sobre el nivel medio del mar. El sótano 1 se encuentra 3 metros por debajo del nivel medio del mar. La distancia entre dos pisos cualesquiera es la misma.

¿Cuántos metros por debajo del nivel medio del mar está el sótano 3?

Garage

0

↓ 2m

-1

↓ 3m

-2

↓ 5m

-3

↓ 5m

2 + 3 = 5m

Because the distance between all floors is the same, these distances must be 5m.

3 + 5 + 5 = 13

Answer : 13 meters below mean sea level

< Attempt 2 of 2 >

Answer: 13

PLAY

MORE THAN 10 MIN | 24 MAR 2026 11:20:11 AM

Student work showing annotation, voice recording, and translation usage