

Dear Parents and Caregivers,

I'm looking forward to a great year of learning math with your student! As we get started, I want to share a little about what learning will look like in our classroom—and why it may look different from the way you learned math.

Many of us experienced math class in a familiar way: the teacher showed a procedure, students copied it into their notes, and then everyone practiced problems that looked a lot like the example. There will certainly be times this year when I explain ideas and introduce mathematical vocabulary, notation, and efficient methods. But most often, I won't start there.

Instead, our lessons will follow an approach called **Experience First, Formalize Later (EFFL)**. Students will first work with their classmates on a carefully designed activity that allows them to explore a new mathematical idea. They might notice a pattern, make a prediction, try a strategy, make use of a visual, or wrestle with a problem they haven't been explicitly taught how to solve yet. Often, they'll do this within a familiar context, such as buying snacks at a gas station or looking at stats on a fitness tracker.

Then we'll bring those ideas together as a class. We'll share strategies, make connections, and put mathematical language and notation to the ideas students have been developing. My role is not to do the thinking for students, but to ask questions that move their thinking forward and help the class turn their ideas into mathematical understanding. This means students will spend much more class time **doing mathematics rather than watching someone else do mathematics**.

Why teach math this way?

Because being able to copy what someone else does is not the same thing as understanding it.

Imagine watching someone solve a math problem at the board. Each step makes sense, and when you receive a nearly identical problem, you can successfully repeat those steps. It can feel like you have learned the concept—and in the short term, you may perform quite well.

But what happens a week later? What if the problem looks different? What if you forget a step or have to decide *which* method to use?

This is the difference between **mimicking a procedure and understanding the mathematics behind it**. My goal is to help students build mathematical ideas they can remember, adapt, and use in new situations.

Research on learning supports this approach. Active learning—where students are doing the thinking, reasoning, discussing, and problem solving—has been shown to lead to stronger

learning and achievement than instruction that relies heavily on listening, memorizing, and repeating procedures.

There is one surprising catch: **active learning doesn't always feel like better learning.**

In one study comparing active and passive learning, students in active-learning classrooms actually *felt* like they had learned less than students who listened to a polished lecture. But when researchers measured what students had actually learned, the opposite was true: the students who had done the harder intellectual work learned more.

Listening to someone explain something clearly can feel comfortable. Wrestling with an unfamiliar idea is harder. There may be uncertainty, wrong turns, and ideas that need revising. Those moments can feel frustrating, especially for students who are used to being shown exactly what to do. But that productive struggle is not time wasted on the way to learning. **It is part of the learning.**

What might you hear at home?

Especially early in the year, you might hear:

"I wish my teacher would just tell us how to do it."

"We had to figure it out ourselves."

"The teacher wouldn't give us the answer."

I understand why those comments might raise questions! In many cases, though, they describe an intentional part of our learning process.

If your student is stuck, one of the most helpful things you can ask is not, "Did your teacher show you how to do this?" but "What have you tried?" You might also ask, "What do you notice?" or "What part makes sense so far?"

These questions reinforce an important message: when something doesn't come immediately, that doesn't mean a student can't do math. It means there is some thinking to do.

My hope is that students leave this class with much more than a collection of procedures they can reproduce. I want them to notice patterns, make connections, explain their reasoning, learn from mistakes, and trust that they are capable of making sense of challenging ideas.

Most of all, I want them to **understand mathematics—not just remember what to do until the test.**

Thank you for partnering with me this year and for trusting the learning process. I'm excited to watch your students think, grow, and discover just how much mathematics they are capable of!