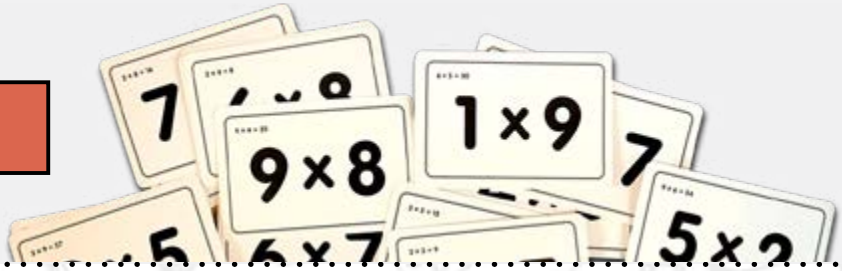
TEACH TRANSFORM
Helping Teachers Make Math Matter

Do All of Your Students Know Their **Multiplication Facts?**

If your students are like nearly everyone else's, they probably don't know all of their multiplication facts. They've learned strategies that help them understand multiplication, and they've likely become fluent for the most part, but some facts just aren't sticking! That can be frustrating both for students and for teachers. Here are some simple ways to help your students learn their multiplication facts, no matter what grade they are in.

Students often aren't sure which facts they know and which they don't. So, when they get tripped up by a few multiplication facts that are hard for them—maybe the 7's or the 8's—they may start to feel like they don't know ANY facts. Here's how you can help them see what they know so they can practice what they don't know.
Put students in pairs and give them a stack of multiplication cards. Have one student show the flash cards to the other. As the student says the product for each card, they put the it in one of three stacks:

Go	Slow	No



First, celebrate the Go's. Whether there are a few Go's or many, the student has a reason to celebrate what they know. When the celebration is over, set the Go's aside.

Then learn the Slow's. Work with the student to see if there's a pattern to the Slow cards. For instance, are most of the 4's in the Slow stack? Have the student practice just the 4's. Then mix the 4's in with the Go cards until they know their 4's as quickly as they know their other Go cards. Have students work their way through the remaining cards in the Slow stack. If students find that there are still some facts they just can't remember, have them put these cards in the No stack for later. Then celebrate! The Go stack is getting taller!

Now tackle the No's. This is the stack that holds the tough facts—the ones that just don't stick in their brains. To become fluent with these facts, your students need to be reminded about strategies. I know that strategies are slower than memorization. But your students will only use strategies on the facts they can't memorize. If the fact isn't sticking, it's okay to go back to the strategy. After they get fast with a strategy, move those cards to the Slow stack and then finally to the Go stack. When students know their facts, they won't need the strategies anymore.

Here's an example of a strategy to remember the 3's. Let's say that 6 × 3 doesn't stick. Your students can use a strategy like "doubles + 1 set" to help them remember the product.

6 × 3 = 6 × 2 + (another set of 6) = 12 + 6 = 18

This is a mental math strategy, not something that should be written. It should be used on facts that students can't remember any other way.

Have students practice their facts for a few minutes of class time each day until they are fluent. This practice should be part of every lab class, every tutoring session, every intervention, every double-blocked class. You can even do it in Algebra.

Once students have learned their facts, everyone—students AND teachers—will feel less stressed. And students will have successfully learned the math they need to learn.