Bridges in Mathematics

Helping at Home: Promoting a Growth Mindset

People used to think that intelligence was fixed and we either had the math gene or we didn't. Luckily, scientists have proven again and again that simply is not true. There is not a math gene! Our brain is like a muscle — the more we use it, the stronger our math brain becomes. A growth mindset is the belief that we can improve our abilities through effort and hard work.

Here are a few things you can do at home to support a growth mindset.

Talk to your child.

Ask what they learned today or have them tell you about something that was difficult and how they approached it.

Help your child see what they can do by asking questions.

- What is the problem about?
- Tell me in your own words. What did you do in class to get started?
- Can you make a diagram or draw a sketch?

Encourage productive struggle and praise your child's efforts.

Building with Legos, riding a bike, or throwing a ball are difficult at first. Instead of telling them how smart or talented they are when they succeed, praise children's effort, persistence, and creativity. Notice when they try new strategies or seek input from others when they get stuck.

Emphasize mathematical understanding over speed.

Many of us were raised to equate fast problem-solving with being strong in math, yet some of the world's best mathematicians are slow thinkers. In "Fluency Without Fear," Stanford Professor Jo Boaler notes that "they are slow because they think deeply and carefully about mathematics." Encourage your child to make sense of a problem rather than focusing on speed. Let's celebrate deep mathematical thinking!

Change that inner voice with the power of "yet."

When a child says, "I can't do this," re-voice the language to say, "You are ready to learn something new!" or "You can't do this YET, and I am here when you are willing to try again!"

Just think how successful we might all be if we believe we can learn and replace our inner critic with an insistent voice reminding us "... yet."