

All About Positive Math Attitudes

Positive math attitudes are beliefs and feelings about math that can support lifelong math learning. Here are some specific positive attitudes that can inspire families to be excited about math.

Believing That Everyone Can Do Math

It is common in some cultures for boys to be seen as being better at math, and some girls start to conform to gender stereotypes around math as early as the beginning of elementary school! But research has shown that girls perform as well as boys in math. Believing that everyone can do math can help children believe that *they* can do math, regardless of whether they're a boy or a girl, or even if they are struggling with a math skill. In fact, our next two positive attitudes are about embracing practice to learn math, even when it's difficult.

Having a Growth Mindset

Often, we hear people referred to as “math people” or not being a “math person,” meaning that being able to do or not do math is something built into the person. But really, with practice, everyone can improve their math skills. If children believe they can change their abilities, they will have an easier time persisting on tricky problems and trying again after a failure.

Embracing Mistakes Along the Way

Sometimes we get caught up in trying to find the right answer to math problems, but we can learn so much from making mistakes along the way. Even when children make mistakes, we can learn a lot about what children *do* know! For example, even if your child miscounted, did they point while they counted? Did they get the number words in the right order? Pointing out the things your child got right, even though they made a mistake, can be helpful for learning. Also, using mistakes as learning opportunities can help reduce some anxiety about math.

Believing That Math is Useful

Children are motivated to do math when they see how it can help them reach a goal, whether it's baking a batch of cookies, setting the table with the right number of plates and cups, or counting the number of bus stops until they reach their destination. It can also be helpful to see how they need to learn math for career aspirations, such as becoming a chef, veterinarian, teacher, architect, engineer, or fashion designer.

Suggestions of How Families Can Support Positive Math Attitudes

One of the best ways for parents and caregivers to support positive math attitudes is to actually do math! When families do math together, parents and caregivers can talk about math in a way that highlights the positive math attitudes we mentioned earlier.

For example, parents and caregivers can:

- Point out the math in activities their child likes.
- Praise success and effort by talking about how hard children worked (“You worked so hard!”) or the process they took (“You figured it out!”), rather than just saying “You’re so smart!”
- Talk out loud about their own mistakes.
- Allow children opportunities to make mistakes and recognize their own mistakes. After they make a mistake, encourage your child to try again or provide a hint that helps them think about the problem in a different way!
- Provide lots of opportunities for both girls and boys to engage in math activities, including the spatial thinking involved in activities like blocks or puzzles.
- Point out how adults use math in different types of jobs.

Incorporating these little messages into everyday conversations and interactions can go a long way toward helping children feel excited and confident about learning math and practicing their math skills!

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