



QUICK REFERENCE CHART

Common Concerns about Math Attitudes

This table is a quick reference for some of the *most common concerns* related to math attitudes. The table lists the concern, an explanation of the thinking behind it, and an idea that addresses the concern. It really is true that our attitude determines our effort, which in turn affects our outcomes. Work to improve your math-positive mindset by trying out the suggestions in the *What to Do* column.

Concern	Explanation	What to Do	Question Number(s) (to Learn More)
Math myths (you must be born good at math)	This is a lingering misconception. Brain research shows there is no such thing as a math gene.	Go online and find Carol Dweck's TEDx Talk entitled "The Power of Yet" and watch it with your children. Discuss how the brain of a person with a growth mindset responds to challenges and to mistakes.	1, 2
I'm not good at math.	Since there is no inheritable math gene, don't let past negative experiences with math prevent you from being a math-positive parent.	Math may look a bit different than it did when you were in school. Learning new ways of understanding math <i>alongside your children</i> may give you exciting new insights into math. It's okay to learn together.	2
Overcoming negative past experiences with math	You may not have had the benefit of learning math using the hands-on, problem-rich methods found in today's classrooms. Give math a second chance! You may just find you like it this time around.	Training your brain to think positively about math is the first step. Then, work to ensure your math talk with children is encouraging and connected to effort and understanding rather than natural talent.	3, 4
Math anxiety	Math anxiety is a genuine psychological phenomenon. But it doesn't have to define your relationship with math or with children.	Math-positive communication makes for math-positive thinking. Focus on what you <i>can</i> offer your children: support, encouragement, and high expectations for their success.	5, 6, 7

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Praise versus encouragement	Praise focuses on products. Encouragement focuses on processes.	Try these encouraging comments: <ul style="list-style-type: none"> • “I can see you’re sticking to it even though this is a hard problem.” • “You show a lot of persistence.” • “Your teacher will be impressed that you used so many different strategies.” 	8
Boys are better at math	Just like there is no math DNA, there is no math chromosome. Maintain high expectations for both genders. Encourage all children to follow their mathematical curiosity, strive to make sense of mathematical ideas, and work to excel in mathematics.	Share books with math-positive female characters. Talk about women’s contributions to mathematics and science. Emphasize that competence in mathematics opens doors of opportunity for all children.	9
How can I help my kids enjoy math as much as I do?	If you find yourself trying to mold your kid into a mini-me, consider the great opportunity you have to let children be their own best self.	Continue to love math and talk positively about it. Also be understanding of your child’s growth into loving it too. Finding how your children’s interests overlap with math will engage them more in authentic ways.	10
Books for growing a math-positive mindset	From celebrating mistakes to taking chances, many picture books show kid-friendly examples of math-positive mindsets.	Check out the suggestions provided and explore new ones with your children.	11