

Math Moment...

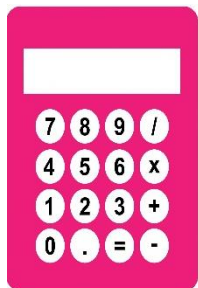
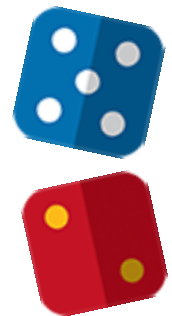
Children do better at school when their parents are involved. Your child’s teacher will do his/her best to keep you well informed throughout the school year, and will always be glad to hear from you. Ask your child’s teacher about your child’s strengths, areas in which to improve, and how you can best offer support at home. Being aware of the learning goals and success criteria for your child’s math course will help you to support your child’s math learning.

Myths and Facts

Myth: The math my child is learning in school is “new.”

Fact: Your child is learning the same math facts and formulas you did—such as $2 \times 2 = 4$, and the circumference of a circle is $2\pi r$. But the way math is taught has evolved in recent decades. Today’s math learning emphasizes the development of understanding of concepts and skills, so that your child is able to apply these confidently in new situations. It also focuses on developing critical thinking, problem solving, and communication skills.

Your child is learning some topics and skills that you may not have learned in elementary school. These include data management and probability, and how to use calculators and computers to help model and solve math problems. What your child is learning in math class, and how your child is learning, are equipping your child for success in today’s knowledge-based economy and our global world.



Myth: Now that we have calculators, students don’t need to know how to add, subtract, multiply, and divide, nor do they need to memorize the “math facts” (such as $7 \times 6 = 42$).

Fact: Knowing how to add, subtract, multiply, and divide are essential math skills and a major emphasis in the Ontario math curriculum. Automatic recall of math facts is needed in higher-level math. Games where children need to keep track of a score or that require automatic recall of math facts are a fun way to practise. Look for opportunities where your child can develop fluency. It takes time. This is a key area where you can help your child at home, by encouraging lots of practise in a variety of ways.

Myth: People who were taught math the old way can’t make sense of today’s math.

Fact: You can learn alongside your child, and strengthen your own math skills in the process. Ask your child to explain and show you what the class is learning. Children are great teachers, and explaining math concepts and procedures to you will help your child to understand them better. Also, ask your child’s teacher for suggestions on how to quickly learn the strategies your child is using.



Myth: Doing well in math is only important if you want to be an engineer, doctor, scientist...

Fact: Math skills are needed in every career – from fashion design to filmmaking, baking to car racing. And everyone needs math skills to effectively manage his/her money and time. A strong foundation in math will open doors to a successful future.

As a parent, there is a lot you can do to help your child learn and love math. Learn about the math that your child is studying in school. Look for math in everyday activities. Offer encouragement and have a positive attitude toward math. Parents can be a great role model, math mentor and coach.

Myth: Math ability is a gift. Some people have the “math gene” and others just don’t.

Fact: There is no such thing as a math gene. Everyone can succeed in math. In fact, more than ability, a positive attitude towards mathematics makes deep learning possible.

#growthmindset

Myth: Mathematicians solve problems quickly and never make mistakes.

Fact: Albert Einstein, one of the world’s great mathematicians, once claimed, “It’s not that I’m so smart, it’s just that I stay with problems longer.” If that was true of Einstein, then it shouldn’t surprise us when we too make mistakes and need time to solve problems.

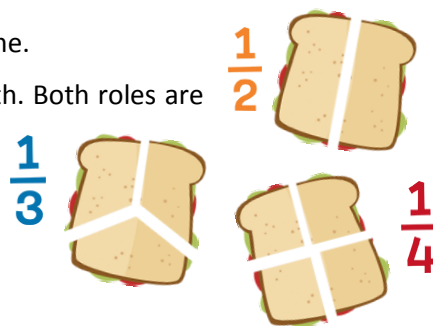


Myth: You have to be good at memorizing to be good at math.

Fact: It is important for your child to be able to quickly recall math facts. But memorization is only one approach. When your child understands the concepts and procedures involved in number operations, and the relationships between addition, subtraction, multiplication, and division, he/she will find it much easier to remember math facts and learn new ones. Math is more about *thinking* than it is about memorizing.

Myth: Math belongs in the classroom. I can’t help my child learn math at home.

Fact: Teachers and parents play different roles in helping children learn math. Both roles are equally important. Your child’s teacher is trained to teach all aspects of the math curriculum. Your role is to support your child in learning math, and to encourage his/her curiosity and interest about math. A key way you can do this is through everyday activities that involve math.



Resources

Video: Why Is Math Different Now? By Dr. Raj Shah (<https://www.youtube.com/watch?v=uOMK6tmHUL8>)

This video explains why math learning today looks different from what you might remember. Now the focus is on building conceptual understanding. When students understand they will be equipped to meet new challenges and learn to persevere, instead of give up.

Video: Growth Mindsets, by Jo Boaler (<http://learnteachlead.ca/projects/jo-boaler/?pcat=1129&sess=0>)

This short video explains the difference between a growth mindset and a fixed mindset and the implications of each mindset for a child’s confidence in his/her ability to succeed at math.

Tip Sheet: Math Tips for Parents, by Lynda Colgan

http://www.edugains.ca/resources/SchoolLeader/IdeasForSchoolNewsletters/MathTipsforParents_Sept2014.pdf

This tip sheet provides advice about how you can help your child learn math, including recognizing math in everyday life and how to be a math role model.

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