



Math Tips for Parents/Guardians

“The key to understanding math is making sense of it. Many students believe that math is a set of formulas that have to be remembered – this belief is associated with low achievement. Math is a very creative subject that is, at its core, about visualizing patterns and creating solution paths that others can see, discuss and critique.”

<http://www.youcubed.org/category/teaching-ideas/number-sense/>

Tips for Supporting Your Child

1. Talk to your child’s teacher when you have questions.
2. Be Positive - every child can learn mathematics with perseverance.
3. Be Less Helpful - always try to have the math come from your child and not the other way around.
4. Try not to tell your child how to do the math. They may not understand your thinking. Instead, ask questions that encourage understanding (“Why did you do that?”, “Why does that work?”, “How do you know you are right?”, “Is there another way you could do it?”).
5. Encourage your children to question and wonder with them.
6. Set High Expectations - children need to learn to persevere, to adjust thinking and strategies if their first attempt at a solution is unsuccessful. Encourage them to keep trying, if your child gets frustrated, take a break and come back to it.

Ontario Ministry of Education Resources

- <http://www.edu.gov.on.ca/eng/curriculum/elementary/math.html>
Curriculum and resource documents for elementary mathematics.
- <http://www.edu.gov.on.ca/eng/curriculum/secondary/math.html>
Curriculum and resource documents for secondary mathematics.
- <http://www.edu.gov.on.ca/eng/literacynumeracy/parentGuideNumEn.pdf>
Kindergarten to grade 6 booklet with tips on how to help your child with math.
- <http://www.edu.gov.on.ca/abc123>
Ministry of Education website available in 15 languages with tips for parents on how to support their child's learning in a variety of subject areas.
- <https://homeworkhelp.ilc.org/>
Homework Help is a free online math help resource for students in Grades 7-10. Homework Help provides free, live one-on-one tutoring from Ontario teachers.
- <http://learnteachlead.ca/projects/leaders-in-educational-thought-mathematics-k-12/>
School Achievement Division video clips from a variety of mathematics education speakers.

Other Resources on the Internet

- <http://www.nctm.org/resources/families.aspx>
NCTM - National Council of Teachers of Mathematics site provides additional resources for families to support children in learning mathematics.
- <http://www.eworkshop.on.ca>
Ministry of Education web site for teachers and parents to explore literacy, numeracy and daily physical education.
- <http://www.dreambox.com>
An elementary math web based support for students. It promotes mathematical understanding of number sense concepts and encourages student perseverance.
- <http://www.peopleforeducation.ca/wp-content/uploads/2012/03/SuccessParentTips.pdf>

A web site to support public education in Ontario schools. Many “tip sheets” for parents available in multiple language.

TED Talks on Math Education

- Dan Meyer - Math Class Needs a Makeover
http://www.ted.com/talks/dan_meyer_math_curriculum_makeover.html
- Conrad Wolfram - Teaching Kids Real Math with Computers
http://www.ted.com/talks/conrad_wolfram_teaching_kids_real_math_with_computers.html
- Carol Dweck – The Power of Believing You Can Improve
https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve
- Angela Duckworth – The Key to Success? Grit
http://www.ted.com/talks/angela_lee_duckworth_the_key_to_success_grit

“There is a really damaging myth that pervades the US/UK and other countries – the idea that some people are born with a “math brain” and some are not. This has been resoundingly disproved by research but many students and parents believe this. It is really important to communicate “growth mindset” messages to students. Help them know that everyone is a math person and that the latest research is telling us that students can reach any levels in math because of the incredible plasticity of the brain.”

<http://www.youcubed.org/category/teaching-ideas/growing-mindset/>