

1, 2, 3 ... go get help with math!

By Jane Whiting

All kids need help with math, at one time or another, and many parents want to know how to encourage, support and improve their child's numerical skills. The good news is that elementary students in Ontario are getting an extra boost with a free online math tutoring service through a pilot project funded by the Ministry of Education.

What help is available through this project? Students in Grades 7 to 10 have access to 20 hours a week of free, online math tutoring with certified Ontario math teachers who are available Sunday to Thursday, 5:30 p.m. to 9:30 p.m., for confidential one-on-one assistance. 15 Englishlanguage boards are taking part in this pilot project, including the Ottawa-Carleton School Board and Ottawa Catholic School Board.

How do we access it? Students can check out the live, interactive math tutoring at <http://HomeworkHelp.ilc.org>. There are discussion rooms for each grade where students can join in and see what questions other students are asking, watch the tutors draw on the whiteboard, and ask their own questions for on-the-spot help. If they can't wait until the discussion rooms open, videos of best tutorials and commonly asked questions are available anytime. Other online math resources include math games and a virtual locker, where students can save their work.

Why is math so important? According to *Helping Your Child Do Mathematics – A Guide for Parents*, prepared by the Ministry of Education for elementary aged students, learning and understanding mathematics teaches problem solving techniques, how to manage time, money and everyday situations, which all contribute to success in daily life and builds confidence. The guide explains that children acquire mathematical knowledge and skills in many different ways both at school and in everyday life, and it includes informative tips and strategies for parents.

How do children learn mathematics? The guide states that children learn mathematics best through activities that encourage them to investigate. They should be encouraged to: think about what they are investigating; gather information, organize it, and act on it; use information that they have gathered

from a variety of sources to solve problems; and explain how they reached their solutions. As children learn more easily when they can connect mathematics concepts and procedures with their own experience, they can use common household objects such as measuring cups, bathroom scales or a deck of cards etc. By observing everyday events (such as weather trends over the course of a week), they can “see” the ideas that are being taught.

What can parents do to support math learning? In tips to parents, the guide emphasizes being positive about mathematics and talking about the ways it is used every day at work and at home, such as making purchases, measuring ingredients, counting out plates and utensils for dinner. It tells parents to: praise efforts to understand or solve math problems and encourage persistence when it seems difficult; play games and do puzzles together that involve math, and include activities that focus on direction, time, logic, reasoning, sorting, classifying, and/or estimating; and, in addition to using a ruler and a calculator for mathematical purposes, use household objects such as toothpicks, a measuring cup or containers of various shapes and sizes.

Are there any specific math exercises to do at home? As well as offering strategies to encourage kids to think about general mathematical uses and practical solutions, the guide contains activities and questions that are fun for parents and children to work on. It suggests that children act out a problem and draw pictures or a diagram, and use object or words to show how they reached a conclusion. Giving an explanation on the solution helps children improve mathematical understanding and reasoning.

What other resources are available to help with math? According to the guide, involving the child’s teacher, family members and people in the community are all useful resources in helping kids learn and understand math. The teacher will be able to assess a child’s level of performance, identify any problem areas and recommend activities to assist mathematical goals. Family and friends can be good motivators and there are numerous professionals who can provide expert advice and strategies to improve numerical skills, as well as books, games and websites.

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