



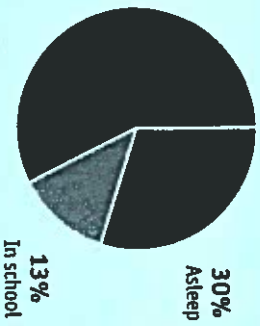
You are their idol. They look up to you. They don't do a good job listening to you, but they do a fantastic job imitating you.
 – Karl Subban, retired Toronto school principal and father of three

Calculating Time Children Spend at Home vs. School (Birth–Age 18)

If a child sleeps for 8 hours in each 24-hour day:

- 8 hours asleep and 16 hours awake
 - 365 days/year x 18 years = 6,570 days
 - 6,570 days x 16 waking hours/day = 105,120 waking hours at age 18
 - Average 6 hours/day at school
 - Average 180 school days/year
 - 180 school days/year x 6 hours/school day = 1,080 hours/school year
 - 1,080 hours/school year x 13 school years (Kindergarten + 12 years through high school) = 14,040 school hours
 - 14,040 school hours = 105,120 waking hours = 133%!
- OR
- Just 13.36% of all waking hours by age 18 have been spent in school!

How children really spend their time (Birth–18 years)



Recommended Resources

There is a wealth of information on the internet in addition to the links and other resources listed below. For an up-to-date list, please check our website.

- *Family Math Canada*
familymathcanada.org
- *Doing Mathematics with Your Child, Kindergarten to Grade 6, A Parent Guide* (Ontario Ministry of Education, 2014)
edu.gov.on.ca/eng/literacynumeracy/parentGuideNumEn.pdf
- *Parent Resources* (Education, Quality and Accountability Office)
eqao.com/Parents/parents.aspx?Lang=E
- *Mathies*, a website designed for Ontario K-12 students and parents
mathies.ca
- *TwoParents* resources to support math learning at home.
twoparents.two.org/topic/school-learning#/1185/math
- *TwoKids* shows about math for children aged 6 to 11.
twoparents.two.org/article/twokids-shows-ages-6-11-teaching-math
- *Family Resources* (NCTM)
old.nctm.org/resources/content.aspx?id=7928
- *Calculation Nation* (NCTM)
calculationnation.nctm.org
- *Illuminations Games, Pre-K-Gr 12* (NCTM)
illuminations.nctm.org/allgames.aspx
- *Mathfrog*
cemc2.math.uwaterloo.ca/mathfrog

Module One
Fact Sheet

General Overview

Count Yourself In



CODE

Council for Ontario Students of Education

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 Oakville, Ontario L6H 6Z1
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Did you know?

- Research shows that early math literacy helps children to succeed in school and improves their future career prospects.
- 70 percent of Canada's top jobs require science, technology, engineering, and math (STEM) education. This includes careers we may not expect, such as culinary arts, animation, and fitness.
- When children are positively engaged and successful, they are more likely to stick with an activity and keep searching for a solution to a problem.
- Early success in problem-solving will build your child's confidence.

Why "Mathitude" Matters

Positive thinking

Students who are encouraged to have a positive attitude about math from an early age will develop positive feelings about the subject.

Keep them engaged

Students who are engaged in the learning process will learn more and be open to further learning.

Motivation

Students who believe that math is important for their future will be more motivated to learn math.

Build confidence

Students who feel confident in their own ability to do well in math will be more likely to perform well.

Parent involvement and math achievement "How can I help?"

Be positive

Choose your words carefully. When parents (and other adults) say they aren't good at math—sometimes to make children feel better—they may be giving children permission to stop learning.

Avoid math anxiety

Math anxiety (unproductive tension and stress) is real and occurs in children as well as adults. Pressure from timed tests and the risk of failure are major sources of math anxiety. Try not to over-react when your child makes a mistake. Making mistakes is an important part of learning!

Learn from mistakes

Homework time can be a more positive experience if you help your children learn from mistakes: praise their efforts, ask them to explain their answer, ask them to think about why the mistake happened, and encourage them to try again.

Help set the tone

Be relaxed and engaged as your child does math homework. You are not expected to be an expert, but you can offer support and ask questions: "How did you do that?"; "Why did you do that?"; "How do you know if you are right or wrong?"; and "Would you teach me how to do another question like this one?"

Be patient and build confidence

If your child becomes frustrated, stop. Remind them of things that they have already learned how to do successfully, such as riding a bicycle or playing a musical instrument.

Ask a teacher

Ask your child's teacher or other member of the teaching team for strategies to use at home. If your child asks for help and you do not know the answer, be honest and say, "I don't know but let's figure it out

together. If we can't, we'll ask your teacher for help together so we can both learn."

Make math part of everyday life!

"What are some math activities I can do to support my child's math learning at home?"

Math games

On no-homework days, quiet evenings, and during vacations, play math games. Math puzzles and games can show that math is fun. They also require trial-and-error thinking, enhance numeracy and logical thinking, and promote discussion. Many mathematicians say a love of puzzles and games inspired their math abilities.

Math on TV

Watch educational television programs. Many offer websites with activities to do together, including free games, apps, math crafts, and songs.

Math at the grocery store

Take your child grocery shopping. The grocery store is full of great math opportunities. You can talk to your child about how to weigh fruit on a scale or how to estimate the total cost of items as you fill your cart.

Math in computer games

If your children enjoy playing on the computer, introduce them to fun and educational web-based games, such as "Mathfrog" and "Calculation Nation."



Yes, you can really help your child succeed in math!