

Understanding Math

Parent Engagement Symposium 2015



Inspire Learning!

Have you ever said or heard...



“I’ve never been good in math.”

“My kids will never be able to do this.”

“It’s ok, you’ll never have to do this in real life.”

“Just use a calculator.”

“The math gene doesn’t run in our family.”

Students whose parents and teachers have high expectations and belief for them tend to have more perseverance, greater motivation to learn mathematics, and more confidence in their own ability to learn and use mathematics.

Our attitudes matter!

Adapted from Student Engagement, Drive and Self-Beliefs, PISA 2012, Ready to Learn, Vol 3., Mathematics: Ontario Curriculum Documents Grade 1-12, Full Day Kindergarten Curriculum.

All students can achieve at
the highest levels in maths
K-12



Boxed Out is a two-player game.

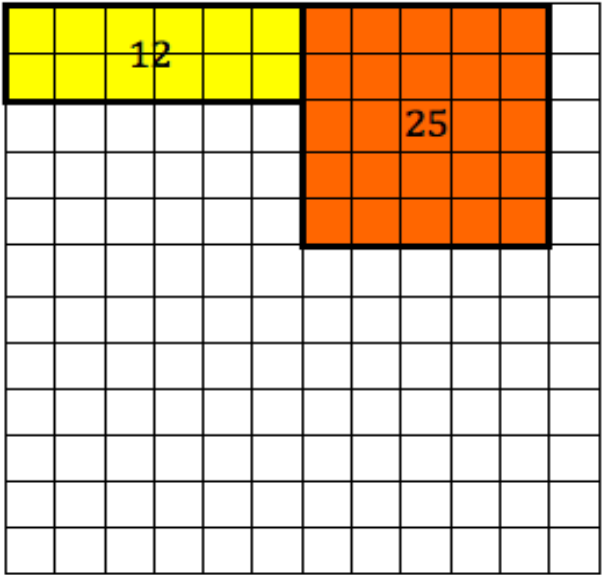
Players take turns rolling two dice.

On your turn:

- Find the product of the top faces of the two dice.
- Capture a rectangular portion of the field with an area equivalent to the product rolled.
- Outline the rectangular portion and label it with the number of square units captured. Rectangles may not overlap.

The game is over when a player can not capture a rectangular portion to match the product of the two dice. The player who has captured the greatest number of square units wins!

Boxed Out



What is a Mathematician?



Achieving Excellence in Mathematics

In order for students to achieve excellence in an area like mathematics, there must be a balance between understanding basic math concepts, practising skills like multiplication tables, and developing the thinking skills needed for advanced problem solving. These foundational skills remain a focus – and combined with creativity and critical thinking, innovative problem solving, effective communication and collaboration, they lead to excellence.

Achieving Excellence: A Renewed Vision for Education in Ontario, April 2014

Math Education Today

- Believes all students, teachers and parents are mathematicians!
- Explores procedures, strategies and number models
- Supports children to persevere in solving problems
- Supports teacher and student collaboration
- Emphasizes clever mental math computation
- Makes mathematical connections

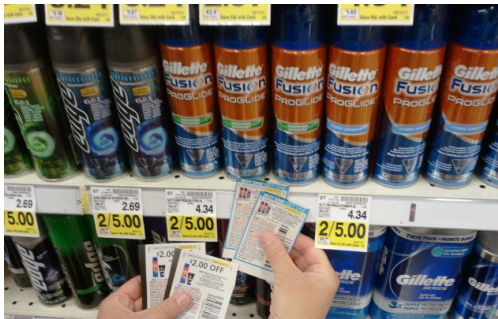
Adapted from, Mathematics: Ontario Curriculum Documents, Full Day Kindergarten Curriculum and *A Parent's Guide to Understanding Math Education in Today's Schools*



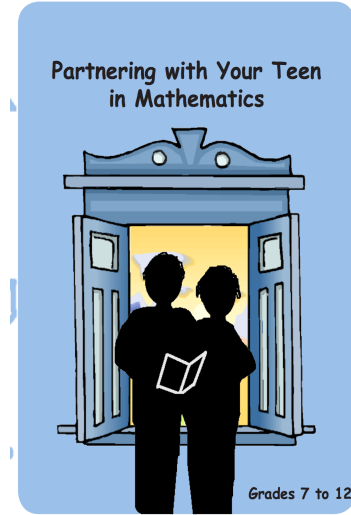
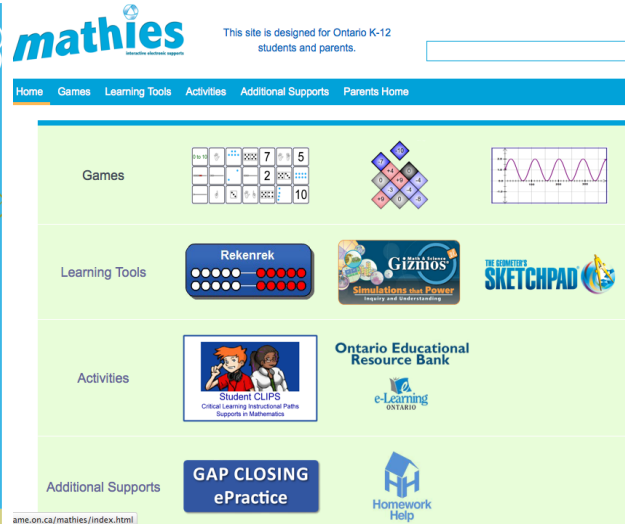
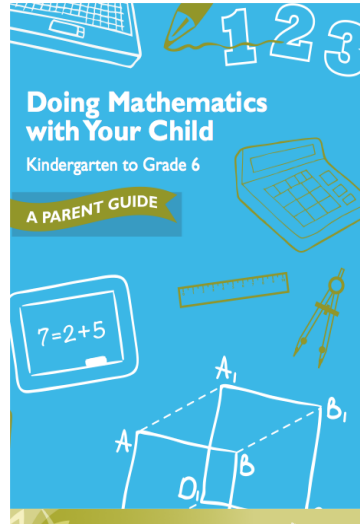
YRDSB's Comprehensive Math Program

Parent Tips!

- Build strong, positive attitudes about math.
- Look for math around you.
- If you and your child are more comfortable in a language other than English, use it.



Resources



<http://goo.gl/XVLTcX>

Before your child can learn mathematics, he or she needs to believe in his or her ability to do so. That's where you come in. You can be your child's first role model for learning. When you engage with your child in a supportive, relaxed atmosphere, your child will enjoy taking risks while having fun with math!

Doing Mathematics with Your Child: A Parent Guide