Website and Resource Ideas

These resources could support student achievement when used with intention and support. This is not an exhaustive list. It is only meant to be an example of possible resources for consideration.

Not all sites are correlated to the Ontario Curriculum Expectations by grade but could be used to support various mathematical concepts where appropriate.

Some sites have a fee attached for more in-depth use.

Name	Web Link	Comment
The National Commands of the National Commands	Elementary	The Ontario Curriculum Grades 1-8: Mathematics, 2005 (revised) Available in both plain text and pdf format.
Mathematics Mathematics	<u>Secondary</u>	The Ontario Curriculum, Grades 9 and 10: Mathematics, 2005 (revised) The Ontario Curriculum, Grades 11 and 12: Mathematics, 2007 (revised) Available in both plain text and pdf format.
EduGAINS	Edugains - K-12 Mathematics	The EduGAINS website houses ministry developed resources to support policies and programs related to improved learning and teaching in Ontario schools.
EQAO	Education Quality and Accountability Office (EQAO)	Practice booklets and home support ideas are available.
OAME PROMOTING EXCELLENCE IN MATHEMATICS EDUCATION	Ontario Association for Mathematics Education	The professional organization for everyone interested in Mathematics Education in Ontario.
Link to Learning	<u>Link to Learning</u>	Links to web sites supporting the Ontario educational curriculum for kindergarten through grade 8.
mathies https://www.nearth.edu.	<u>Mathies</u>	Designed for Ontario K-12 students and parents, this site features learning tools, activities and more.

Name	Web Link	Comment
National Library of Virtual Manipulatives	http://nlvm.usu.edu/	A library of interactive web-based virtual manipulatives for mathematics instruction (K-12 emphasis).
Syoucubed at Stanford University	http://youcubed.stanford.edu/	YouCubed is a non-profit website initiated by British educator, Jo Boaler, and provides K-12 mathematics resources for teachers, administrators, parents, and students.
	https://www.khanacademy.org/	Khan Academy is a free site offering practice exercises and instructional videos.
NCTM ILLUMINATIONS	National Council of Teachers of Mathematics - <u>Illuminations</u>	NCTM US site with resources and interactive activities for teachers and students.
	<u>Nrich</u>	NCTM US site with resources and interactive activities for teachers and students.
Figure This Math Schallenges for Families	NCTM - <u>Figure This!</u>	NCTM US site with an assortment of mathematical challenges based on real life situations.
tvo Never stop learning	http://tvo.org/education	Variety of resources are available including online game environment programs to support students in the learning of mathematics.
Kidsspace	Toronto Public Library - <u>KidsSpace</u> (click on <u>Tumblebooks</u>)	Animated, talking picture books. It also includes National Geographic videos and games and more.
Primary / Junior LearnAlberta,ca	Math 3 Under the Sea	Developed for elementary school students, this collection of interactive mathematics resources has 14 lessons including Counting Money, Number Forms, Time, Comparing and Ordering Numbers.
Primary / Junior Learn Alberta,ca	Math 5 Alive	Developed for elementary school students, this collection of interactive mathematics resources has many lessons to choose from including Place Value, Multiples, Factors, Primes and Composites, Proper Fractions, and Time.

Name	Web Link	Comment
Primary / Junior	<u>Fun Brain</u>	Contains a huge assortment of interactive math games. Students can select their grade level, and are presented with a wide variety of skills to choose from.
Primary / Junior	<u>Kids' Zone</u>	At this interactive math site, students can create different kinds of graphs, including bar, pie, line, area, and XY graphs.
Primary / Junior ATH LAYGROUND	Math Playground	Games, Worksheets, Logic Puzzles, Word Problems and amazing Math Movies.
Junior Learn Alberta,ca	Spy Guys	This collection of interactive mathematics resources includes 16 lessons for junior math. Printable worksheets, parent notes, problemsolving strategies, and a glossary are included.
Intermediate / Senior Homework Help	https:// homeworkhelp.ilc.org/	This free online resource is available to all students from grade 7-10 in Ontario. Students can log in with their OEN. They will find "best sessions" that are pre-recorded and available 24-7 as well as access to an online tutor during specified times.
Intermediate / Senior Student CLPS Critical Learning Institutional Partis Supports in Mathematics	Critical Learning Instructional Paths Supports (CLIPS)	CLIPS are instructional trajectories focused on key mathematical concepts. Focusing on grades 7 to 12, they include interactive activities, games, quizzes and learning tools.
Intermediate / Senior Purplemath	https://www.purplemath.com/	Purplemath's algebra lessons are written with the student in mind. These lessons emphasize the practicalities rather than the technicalities, demonstrating dependable techniques. The lessons are cross-referenced to link to related material.

Math Dictionaries



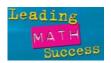


Harcourt **Animated Math Glossary**

Animated glossary of math terms.

Math Dictionary for Kids

An interactive, animated, teaching dictionary, which explains over 600 common mathematical terms in simple language with definitions, examples, activities, practice and calculators.



Leading Math Success

- Support your child through homework challenges by listening and asking questions
- Allow your child to struggle through the process of problem solving
- Discuss mistakes as learning opportunities

Ouestions to Ask ...

- What do you need to find out?
- Tell me what you know?
- Show me what you started?
- What can you try first?
- Can you make a drawing or picture?
- Will a list or table help?
- Why did you...?
- What can you do next?
- Do you see any patterns?
- Does the answer make sense?
- Tell me in a different way...
- What would happen if...?

Prompts ...

- Ask your child to show you how he/she is finding the answer
- Share your method
- Explain to each other why your different methods are successful
- Providing shortcuts for getting the answer might hinder deeper student understanding

Discuss...

- Video and computer games
- Television shows (learning channel, ...)
- Travelling (calculating distances, destination estimation, budget, gas prices, ...)
- Banking (loans, mortgages, interests, ...)

Problem-Solving Strategies...

- Guess and check
- Look for a pattern
- Make a diagram or model
- Act it out
- Work backwards
- Simplify the problem
- Eliminate possibilities

	Make a systematic listGet advice or researchSleep on it
Home Activities	 Play games - Chess, Checkers, Cribbage, Bridge, Euchre, Memory Games, Backgammon, Make puzzles Involved your child with shopping Engage in the mathematics of cooking and baking Plan and execute home renovations