Enhancing Mathematics Education in the Toronto District School Board

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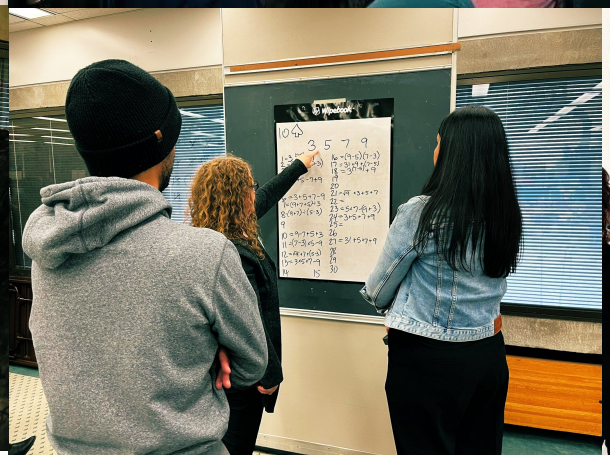
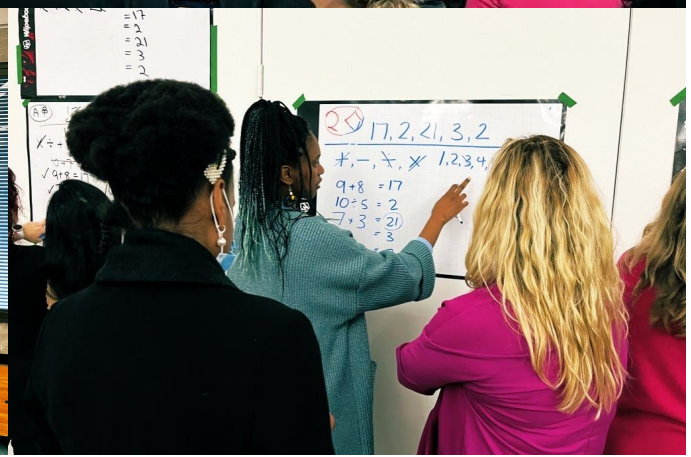
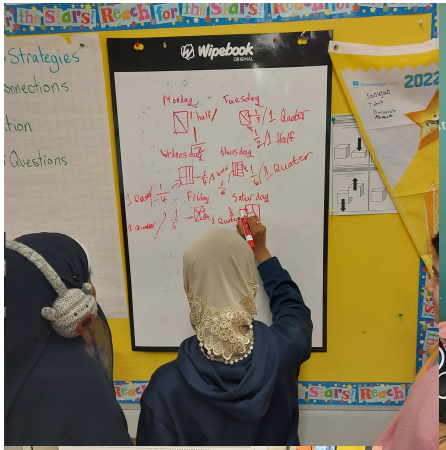
Toronto District School Board

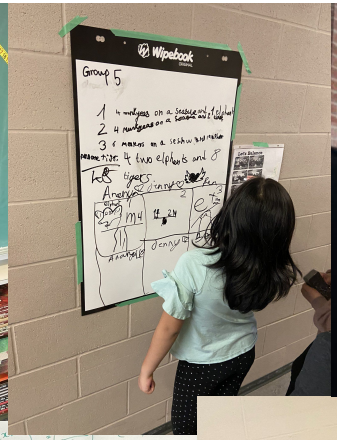
Building Thinking Classrooms in Mathematics

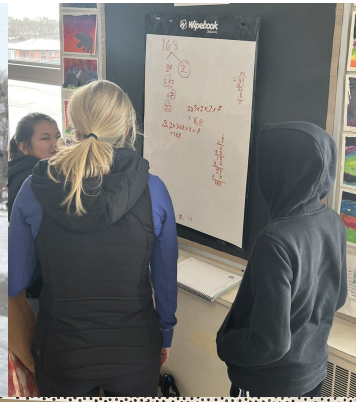



17, 2, 21, 3, 2
9+8 =17
10÷5 = 2
-7+3 = 21
= 3


Wipebook
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

Wipebook
Group 1
Group 2


Wipebook
Group 5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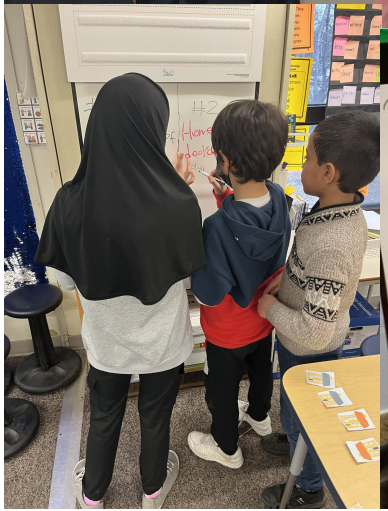
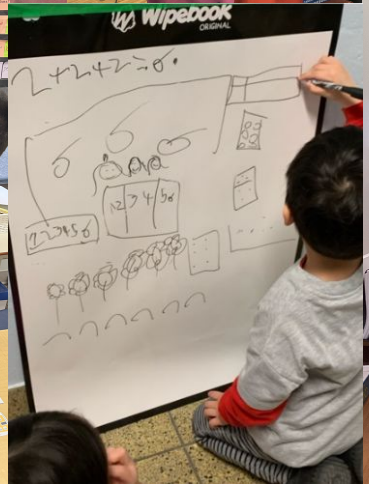
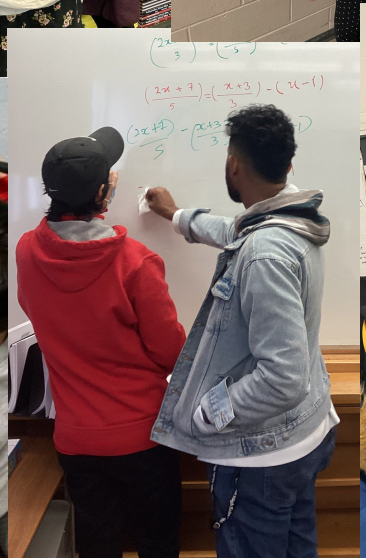
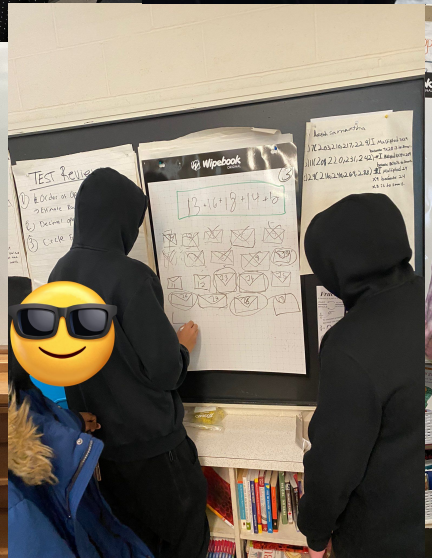
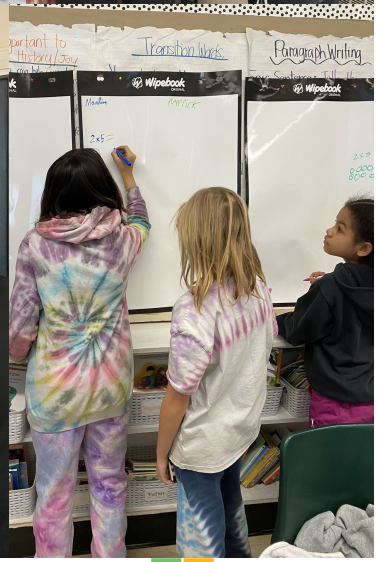



Wipebook
ORIGINAL




Wipebook
TEST


Transition Words
Paragraph Writing
Wipebook

Use Thinking Tasks

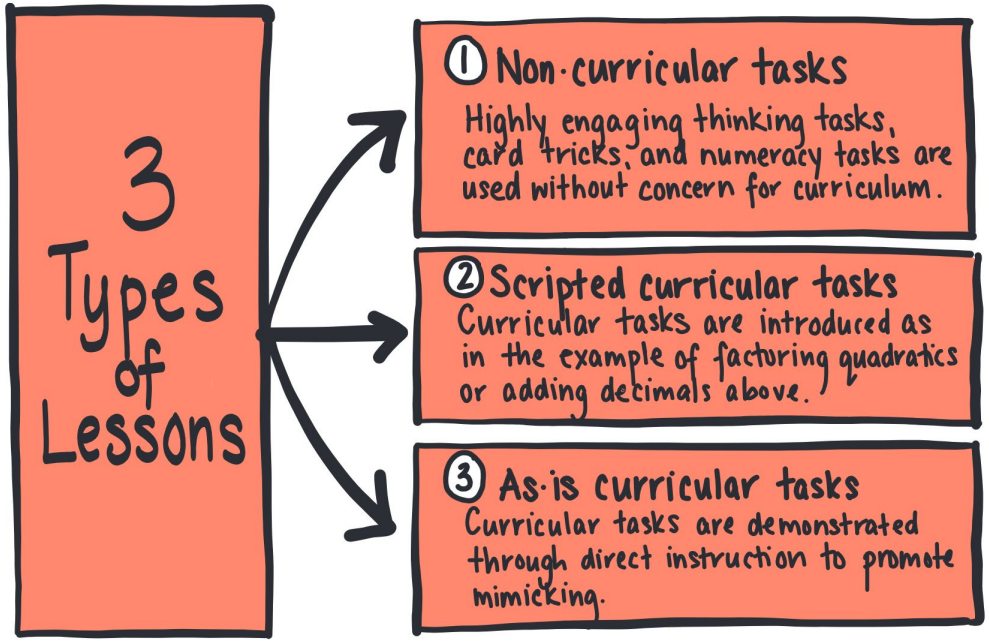


Figure 1.2 Three types of lessons.

1. $(x+2)(x+3) = x^2 + 5x + 6$

2. $(\quad)(\quad) = x^2 + 7x + 6$

3. $(\quad)(\quad) = x^2 + 7x + 12$

4. $(\quad)(\quad) = x^2 + 14x + 24$

5. $(\quad)(\quad) = x^2 + 10x - 24$

6. $(\quad)(\quad) = x^2 + 4x - 12$

7. $(\quad)(\quad) = x^2 - x - 12$

8. $(\quad)(\quad) = x^2 - 2x - 24$

9. $(\quad)(\quad) = x^2 - 6x - 16$

10. $(\quad)(\quad) = x^2 - 0x - 16$

11. $(\quad)(\quad) = x^2 - 25$

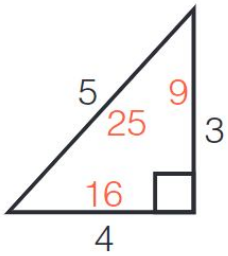
12. $(\quad)(\quad) = x^2 - 49$

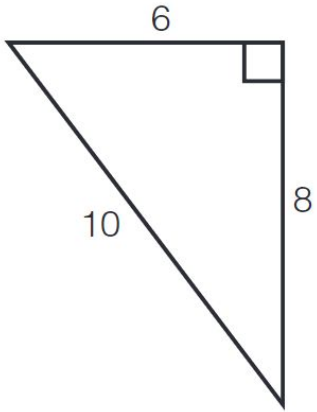
13. $(\quad)(\quad) = x^2 - 10x + 24$

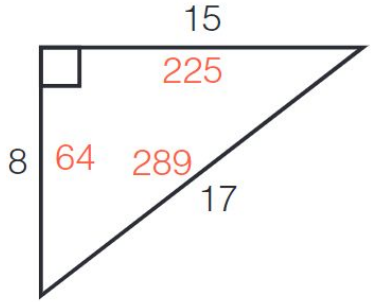
14. $(\quad)(\quad) = x^2 - 13x + 12$

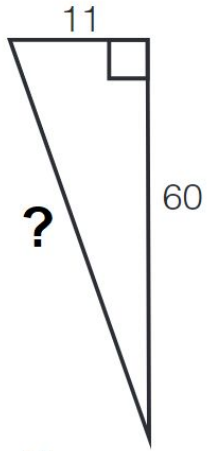
Sequence: Simplifying Algebraic Expressions

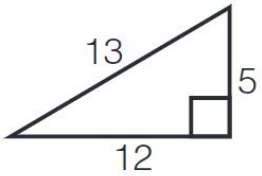
Stage	Questions
A	Simplify these mathematical statements 1. 5 MOOSE + 4 SHEEP + 3 MOOSE – 2 SHEEP 2. 8 MOOSE + 5 SHEEP – MOOSE – 4 SHEEP 3. 6 MOOSE + 2 SHEEP – 5 MOOSE + 3 SHEEP + 8 MOOSE – SHEEP ****CHECK WITH MR. TO!****
B	Simplify these algebraic statements 4. 8M + 5S – 2M + 3S 5. 6M + 8S – M + 2S 6. 9x + 3y + 2x + 4y ****CHECK WITH MR. TO!****
C	Simplify: 7. 9x + 3 + 2x + 4 8. 7x + 6 – 3x + 5 9. 9x – 4 + 3x + 6x – 3 + 5x ****CHECK WITH MR. TO!****
D	Simplify: **10. $6x^2 + 5x + 8 + 3x^2 – 2x – 1$** 11. $8x^2 – 2x + 4 – 6x^2 – 3x – 7$

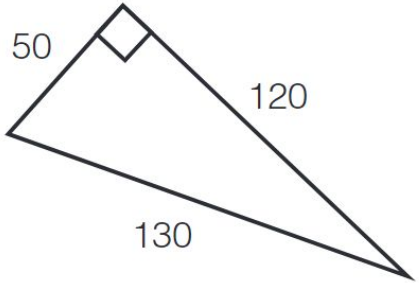


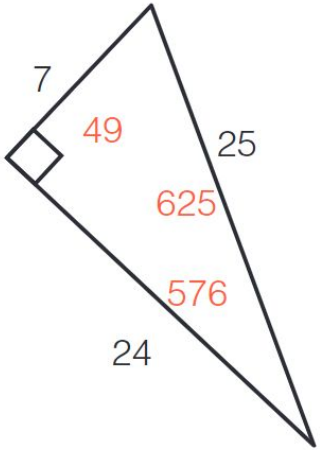


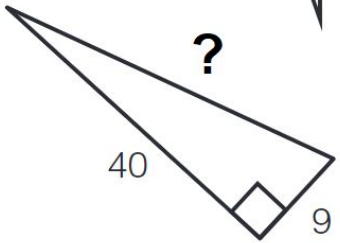










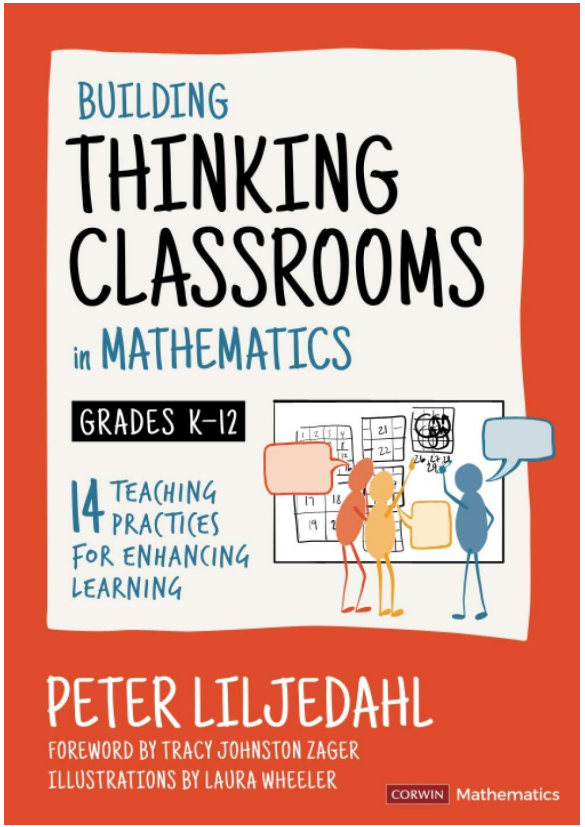


Adapted from: Liljedahl, P. (2021). *Building Thinking Classrooms in Mathematics, Grades K-12: 14 Teaching Strategies for Enhancing Learning*. Corwin: Thousand Oaks.

Learning Together

TDSB Math Bookcase

bit.ly/tdsbmathbookcase



Let’s do more math together

27 + 34

Let’s do more math together

15 x 8

Number Talks at Home & School

Provide a thoughtful question and time to think

Give a chance to share their strategy (and not just the final answer)

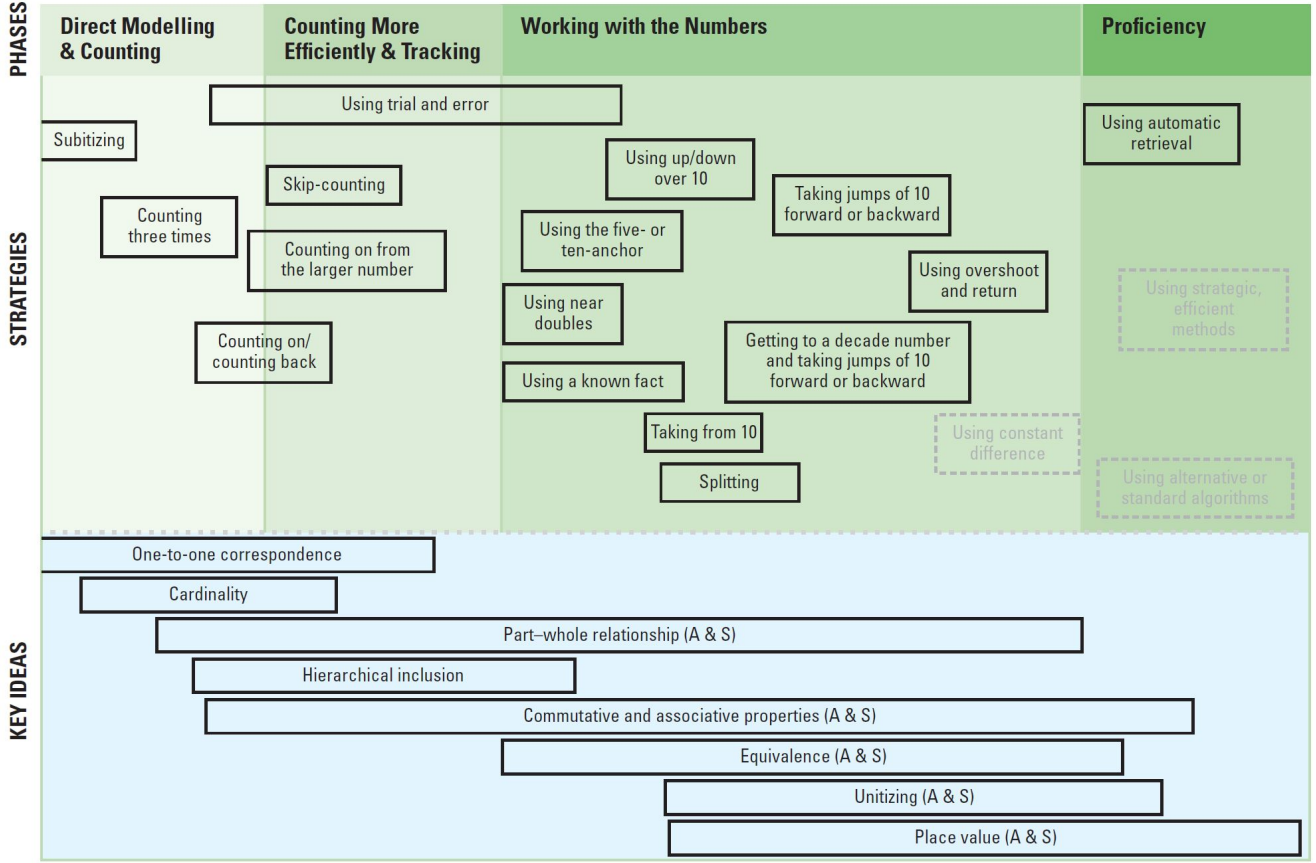
Ask for another strategy

Make connections between strategies (compare and contrast)

Praise the effort and thinking!

Building Foundational Math Skills in the Early Years

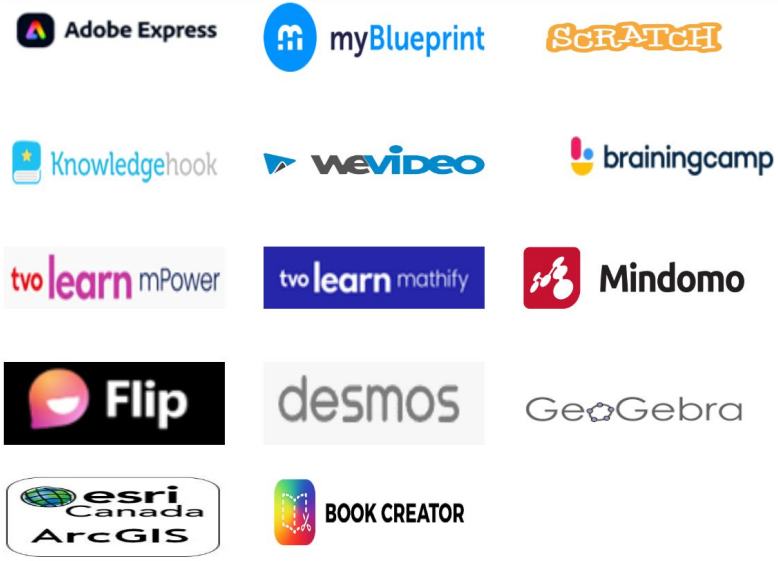
Student Continuum of Numeracy Development: Addition and Subtraction



Accessing Digital Math Tools at Home

TDSB Virtual Library

Make & Do

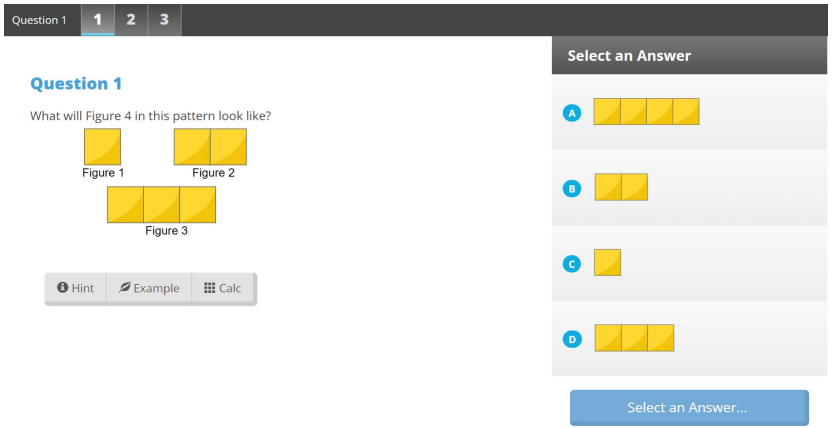


www.tdsb.on.ca/library/HOME/Read-Watch-Learn

Knowledgehook

What is it?

Math activities and questions in a game-based environment.



Free Online Tutoring

tvo Mathify

PAPER

brainfuse

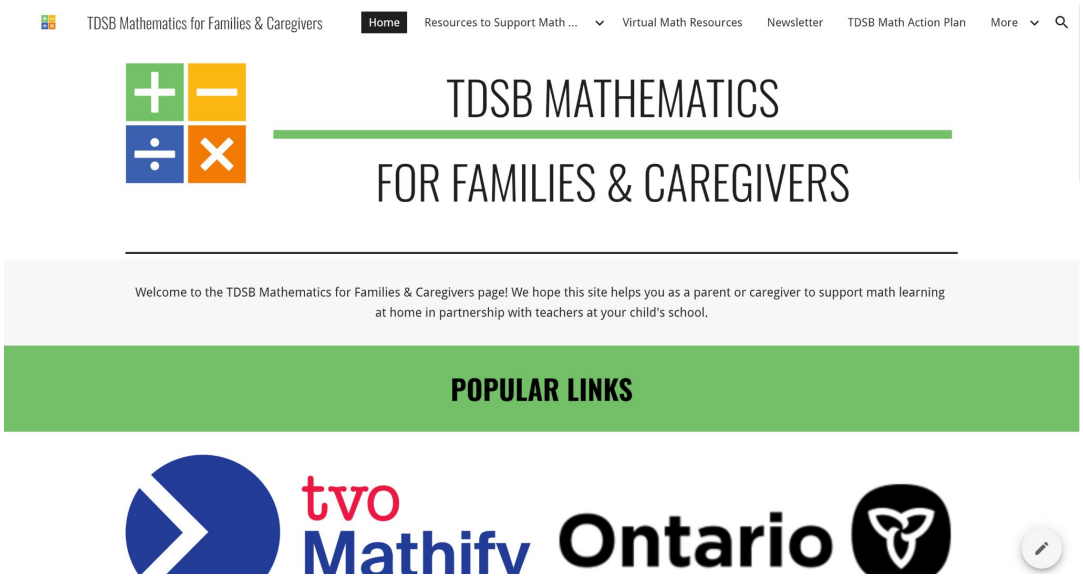
www.tdsb.on.ca/School-Year-2022-2023/Tutoring/Free-Online-Tutoring

Summary

The TDSB is working to:

- Build thinking classrooms to accelerate learning
- Build foundational math skills in the early years
- Provide digital math tools to schools and families

Visit TDSB Math For Families



bit.ly/tdsbmathforfamilies

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