

# OPTIONAL CONTINUOUS STUDENT LEARNING AT HOME

▶ **Math RESOURCES**  
Elementary K-2

# Elementary Mathematics

“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 exploring the world of mathematics.**”



## Kindergarten Number Facts and Operational Skills

Ministry of Education document *Doing Mathematics with Your Child Kindergarten to Grade 6 A Parent Guide*  
[edu.gov.on.ca/eng/literacynumeracy/parentGuideNumEn.pdf](http://edu.gov.on.ca/eng/literacynumeracy/parentGuideNumEn.pdf)

## Grade 1 & 2 Number Facts and Operational Skills

1

Students should be able to represent and order numbers to 50 by the end of grade 1

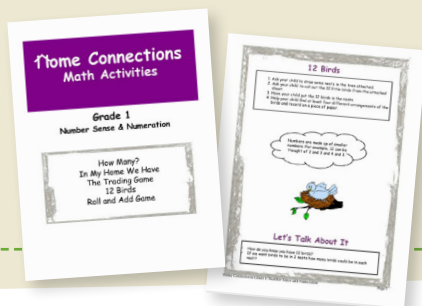
### Adding & Subtracting:

- Add and subtract money amounts to 10 cents
- Adding and subtracting number to 20 (e.g. using drawings or **base 10s**, **money**, **number lines**)

Try these great activities!

### Grade 1 Home Connections

[mathies.ca](http://mathies.ca) Numeration



2

Students should be able to represent and order numbers to 100 by the end of grade 2

### Adding & Subtracting:

- Adding and subtracting two digit numbers in a variety of ways (e.g. using drawings or **base 10s**, **money**, **number lines**)
- Add and subtract money amounts to 100 cents (**money**)

### Multiplying & Dividing:

- Relating equal sized groups to multiplication
- Relating sharing equally to division

Try these great activities!

### Grade 2 Home Connections

[mathies.ca](http://mathies.ca) Numeration

## Key concepts of counting:

### Counting Concepts

- Counting in a sequence (i.e., the concept that the counting sequence is always the same – 1 is followed by 2, 2 by 3, and so on)

It is always...  
1, 2, 3, 4, 5, 6, etc.

It is not  
1, 2, 3, 4, 6, 8, 9, 10

- Using one to one correspondence when counting (counting only 1 object at a time)
- Compose and decompose quantities to 10

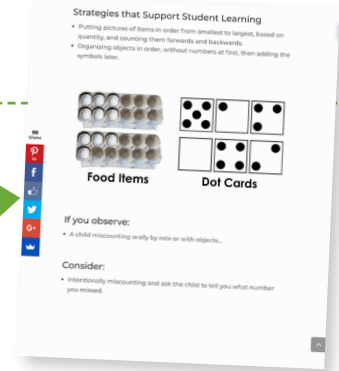
# Problem Solving Tasks

## KINDERGARTEN



**COUNT WITH YOUR CHILD**

Read about some counting strategies and concepts here



**Counting concepts and activities**

[tapintoteenminds.com](http://tapintoteenminds.com)

**Strategies for Counting**  
The Learning Exchange

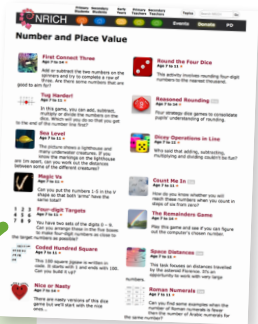
### Counting Activities

**Ask your child to...Make 5 or 10 in as many ways as possible.**

**Go on a walk and collect items. Count the items.**

**Play dice board games**

(Count the number of dots on the dice, move forward one step at a time)



Find more ideas here  
**Numbers and place value**  
[rich.maths.org/13786](http://rich.maths.org/13786)

### Measurement Activities

**Using items you have multiples of (e.g. toothpicks, straws) measure items around your home.**

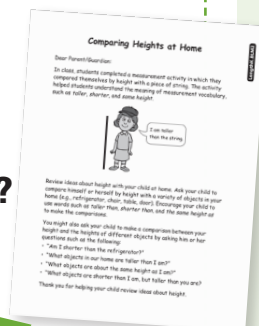
**Ask your child...**

**Which item is longer?**

**Which item is shorter?**

**How do you know?**

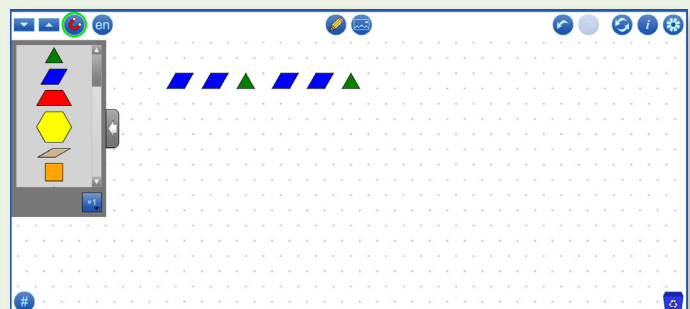
[thelearningexchange.ca](http://thelearningexchange.ca)



### Patterning Activities

**Make a pattern using the Pattern Blocks**

**Ask your child...Tell me about your pattern.**



# Problem Solving Tasks

## GRADE ONE



### Counting Activities

**Make 10 cents  
in as many ways  
as you can**

mathies: money



Try this  
Patterning  
Activity

### Solving Math Problems

#### Act the Problem Cards

##### Act the Problem Card #1

The children are getting ready to see a performance. Sammy, Alta, Mervin, and Cassi put their chairs in a row. Tunis, Kay, and Edwin put their chairs in the same row. How many chairs are in the row?

##### Act the Problem Card #2

The children lined up their lunches along the window. Ten lunches were along the window. Then, Mary, Sun Woo, and Rishi took their lunches to the table. How many lunches are left along the window?

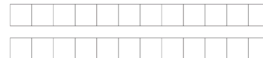
[thelearningexchange.ca](http://thelearningexchange.ca)

#### What Part of the Pattern Is Covered?

Dear Parent/Guardian:

We have been exploring patterns at school. Ask your child to explain how the class used coloured cubes to create patterns.

Ask your child to colour the squares in the following patterns. Ask him or her to describe each pattern, and to explain how the pattern could be extended.



Next, create a repeating pattern, using small objects such as beans and macaroni (e.g., bean, macaroni, macaroni, bean, macaroni, macaroni, bean, macaroni, macaroni). Have your child continue the pattern by adding a few more of the objects.

Cover part of the pattern with your hand.



Ask your child to identify the covered part of the pattern, and to explain how he or she knew what was covered.

Together, create other patterns, using small objects. Cover different parts of the pattern, and have your child explain what is covered.

[thelearningexchange.ca](http://thelearningexchange.ca)

**FUN activities  
about numbers  
& place value...**

[rich.maths.org/13786](http://rich.maths.org/13786)

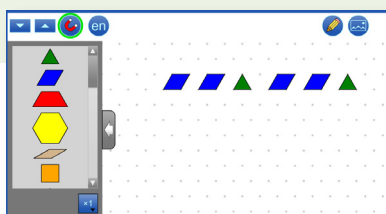
Read about  
more fun math  
games here

[eworkshop.on.ca](http://eworkshop.on.ca)

### Patterning and Algebra Task

**Make a pattern using  
the Pattern Blocks**

**Ask your child...Tell me  
about your pattern.**



#### Measuring and Comparing Lengths at Home

Dear Parent/Guardian:

Your child has been learning to measure and compare objects by length, using non-standard units (e.g., paper clips, toothpicks, small cubes). By placing the non-standard units beside objects, students can determine which object is longer.



Provide your child with an opportunity to measure and compare the lengths of objects at home. Find three objects (e.g., belt, shoelace, piece of string) to measure. Ask your child to use non-standard units (e.g., paper clips, toothpicks, spoons) to measure the length of each object.

Next, have your child compare the objects by referring to their lengths (e.g., "The belt is longer than the shoelace because the belt is 15 toothpicks long and the shoelace is 12 toothpicks long").

You might also have your child use non-standard units to measure and compare the widths of three objects (e.g., window, door, table). Thank you for providing your child with opportunities to measure and compare the lengths of objects at home.

### Measuring Activity

**Measuring using  
non standard units**

[eworkshop.on.ca](http://eworkshop.on.ca)





# Problem Solving Tasks

## GRADE TWO



### Counting Activities

**Make 56 cents  
in as many ways  
as you can**

[mathclips: money](#)

Read about  
more fun math  
games here  
[eworkshop.on.ca](#)

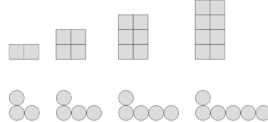
### Addition & Subtraction Strategies

### Patterning and Algebra Task

**Make a pattern using  
the Pattern Blocks**  
**Ask your child...Tell me  
about your pattern.**

#### Growing Patterns

Dear Parent/Guardian:  
We have been exploring growing patterns. Here are examples of growing patterns:



Create growing patterns with your child, using small items that you have at home (e.g., pennies, buttons, beads, macaroni). Ask your child to explain how the patterns grow. For example, "In this pattern, explain, 'You add 2 more pennies each time you go to the next one.'"

You might also use small items to create growing patterns and then ask your child to explain how the patterns grow. For example, "In this pattern, explain, 'You add 2 more pennies each time you go to the next one.'"

Enjoy exploring growing patterns!

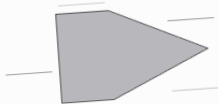
Try this  
Patterning  
Activity

#### Measuring Perimeter

Dear Parent/Guardian:  
In math, the class has learned that perimeter is the distance around a shape. Here is an activity that will help your child review ideas about measuring perimeter:

Have your child cut out the ruler piece at the bottom of this page. Challenge your child to use the "broken" ruler to measure the length of each side of the following shape. Next, have him or her find the perimeter of the shape.

Record the length of each side.



The perimeter of the shape is \_\_\_\_\_

Ask your child to explain how he or she used the broken ruler to find the perimeter of the shape.



### Measuring Activity

**What is perimeter?**  
**Give this measuring  
activity a try!**

[thelearningexchange.ca](#)

#### Show What You Know!

Tip for parents: when adding numbers mentally, a good strategy is to break up numbers (or decimals) into tens or fives. Try these questions without any paper, pencil, or calculator. Use your brain and see what happens! Try it with your child; you will be amazed!

35 + 20 = 55	35 + 5 = 40	35 + 30 = 65
55 + 5 = 60	40 + 23 = 63	65 - 2 = 63
60 + 3 = 63		

Show what you know in 3 different ways!

$$59 + 47$$

$$52 + 49$$

$$82 + 29$$

Writing the questions horizontally encourages mental math!  
[thelearningexchange.ca](#)

#### Number Strip Cover-Up

Each player needs a number strip like this one:



Players take turns rolling 2 number cubes and can either add or subtract the two numbers that come up.

Each player uses a counter (button, bread tag, small piece of paper) to cover the number on the number strip that matches the answer he or she gets at each turn.

The first player to cover all the numbers on the number strip wins the game.

#### Lucky Rolls

One of the players rolls a number cube to decide the lucky number.

Players take turns rolling 2 number cubes and can either add or subtract the two numbers that come up.

Every time a player makes the lucky number, he or she earns a point.

The first player to get 10 points is the winner.

[thelearningexchange.ca](#)

Try this  
Add/Subtract  
Activity

**FUN activities about numbers & place value...** [nrich.maths.org/13786](http://nrich.maths.org/13786)

# ONLINE RESOURCES

## Ministry of Education's Mathematics Parent Guide

### K-6 Mathematics

[edu.gov.on.ca/eng/  
literacynumeracy/  
parentguidenum.html](http://edu.gov.on.ca/eng/literacynumeracy/parentguidenum.html)



Read the Ministry of Education's guide to adding math into everyday activities at home. Help your child add, subtract, divide and multiply with confidence.

**Available in 13 languages.**

## Storytime Math

[mathstorytime.ca/en](http://mathstorytime.ca/en)

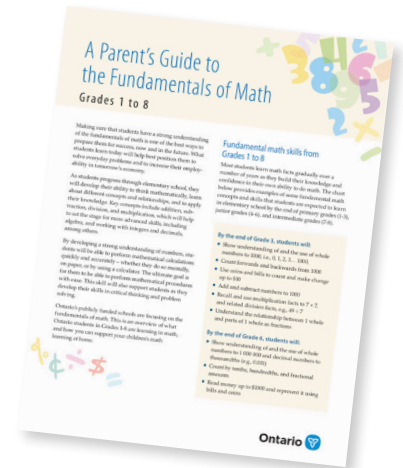
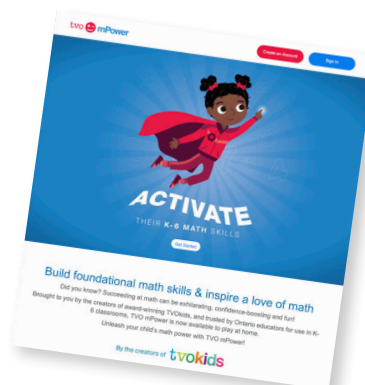
The objective of Math Storytime is to help parents explore simple math concepts with their children (age 5-7) through stories...



## TVO MPower

[tvmpower.com](http://tvmpower.com)

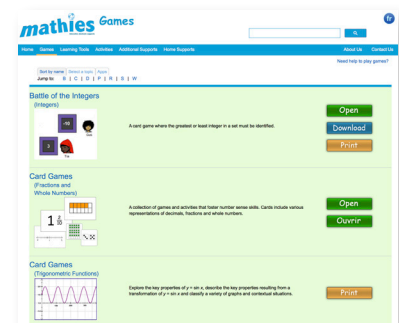
Build foundational math skills & inspire a love of math. Did you know? Succeeding at math can be exhilarating, confidence-boosting and fun! Unleash your child's math power with TVO mPower!



## Fundamentals of Mathematics – Parent Guide (Grades 1-8)

[http://www.edu.gov.on.ca/eng/  
parents/parent\\_guide\\_math\\_  
en.pdf](http://www.edu.gov.on.ca/eng/parents/parent_guide_math_en.pdf)

This is an overview of what Ontario students in Grades 1-8 are learning in math, and how you can support your children's math learning at home.



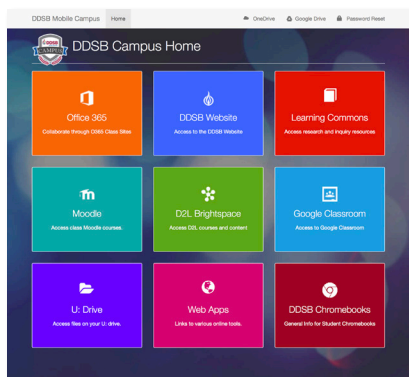
## Mathies Games

[mathies.ca/games.php](http://mathies.ca/games.php)

Catch a Bouncing Ball  
Operations

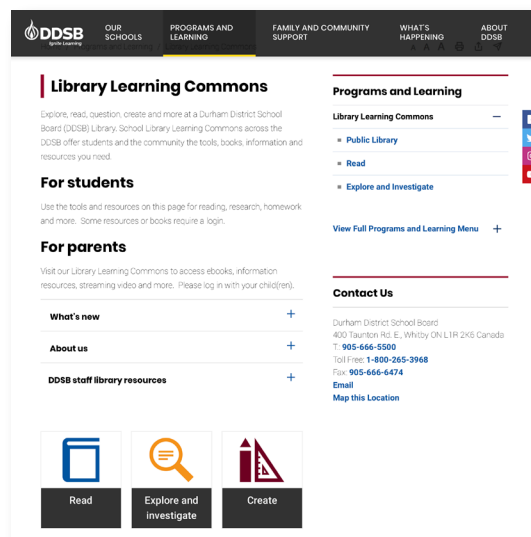
Representation Match  
Catch a Bouncing Ball  
Representation

# DDSB Student Mobile Campus



**Student Mobile Campus** is the home page for all students in the DDSB. Students can start here for links to DDSB cloud platforms and online learning environments used in the classroom. Students will also find links to supported digital tools and websites.

[student.ddsb.ca](http://student.ddsb.ca)

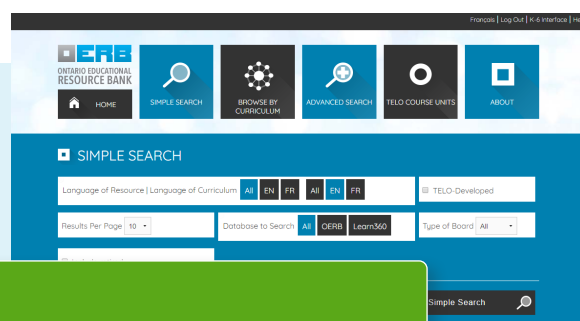


DDSB **Library Learning Commons** Site, accessible from the Student Mobile Campus, provides links to ebooks, streaming video, and research databases. While at school, students do not need to log in to library services. To login at home, please ask your classroom teacher or school's teacher-librarian.

[ddsb.ca/library](http://ddsb.ca/library)

## Ontario Educational Resource Bank (OERB)

The OERB is available to students and parents to access ministry- and teacher-curated resources and activities, searchable by grade and curriculum area. Students can access the OERB from home by clicking on D2L Brightspace on the Student Mobile Campus and selecting the OERB link from K-6 Tools or 7-12 Tools.



**D2L Brightspace**

Access D2L courses and content