



The Halton Resource Connection

# EXPLORING MATH OUTDOORS

## INFORMATION AND INSPIRATION

There should be no such thing as boring mathematics. - Edsger Dijkstra

### HOW DO YOU SUPPORT MATH IN THE OUTDOOR ENVIRONMENT?



#### ✓ What are ways to encourage Math in nature?

- Talking about math concepts outdoors (how many steps does it take to walk from one end of the outdoor space to the other, how many sticks can we find, how long are each of the sticks...)
- Providing materials (see Pg 2) that support building math concepts



#### ✓ Benefits of exploring Math outdoors

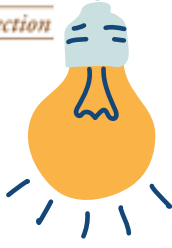
- A bigger space to learn and explore new concepts
- Using natural materials
- Nature provides so many valuable spontaneous learning opportunities that develop through observations and conversations.



#### ✓ Math is more than a number

Math is more than adding and subtracting numbers or counting. Math involves other skills such as weight, distance, and capacity/ volume, shapes, patterns and more.





**Mathematics** is not about numbers, equations, computations, or algorithms; it is about **understanding**  
-William Paul Thurston



## Materials to have outside to support Math

- Tape Measures, Rulers, Meter Sticks
- Scales (or make your own)
- Measuring Cups/ Spoons
- Clipboards, Pencils, Paper
- Buckets with Shovels
- Pattern Cards
- Thermometers
- Ice Cube Trays
- String (to measure around trees, or other objects in the outdoor space)



## What other materials can you take outside?

**What materials can you find outside that you can use to support other math concepts?**

# ADDITIONAL RESOURCES

### Video:

Taking Math Outdoors: A Natural Early Math Learning Environment

<https://vimeo.com/605805070>

Book Bag: Math- Learning to Count - # 11778

Resource Bins: Creating Patterns - # 5028

Shapes and Colours - # 121

