



## HELLO PARENTS,

Outdoor environments offer an opportunity for children to learn new things, as well as practice concepts that they have learned at school, from books or other resources. Extending math learning to the outdoors creates a unique experience that enhances and compliments indoor learning. It makes exploring math more active and physical by using a wide range of nature materials. In this newsletter, we offer activities that will encourage your child to practice math during outdoor play.

## ACTIVITIES

### INFANTS (3 -18 MONTHS)

#### PLAY WITH BALLS

##### MATERIALS:

- A variety of balls

##### DIRECTIONS:

- Bring a few different balls with you when you take your child outside to play.
- Roll the balls back and forth with your child or throw them and watch them bounce.
- While playing balls with your child, use descriptive words such as: big/small, far/close, high/low, fast/slow, etc.

[Click here](#) to listen to the "Open Shut Them" song.

### TODDLERS (19 MONTHS – 2.5 YEARS)

#### GEOMETRY MOVES

##### MATERIALS:

- Sidewalk chalk in different colours

##### DIRECTIONS:

- Draw some basic geometrical shapes in different colours on a sidewalk.
- Help your child learn the names of the shapes.
- Jump with your child from one shape to another and name each shape.
- Next, call out a shape and encourage your child to find it and jump to it.
- You can also choose other movements to move from one shape to another. For example: hop, fly, crawl, etc.
- Take turns being the "caller" and "jumper".

[Click here](#) to listen to "The Shapes Song".

### PRESCHOOLERS (2.5 – 5 YEARS)

#### MATCH NATURE ITEMS TO NUMBERS

##### MATERIALS:

- Rocks
- Marker
- Container
- Tray

##### DIRECTIONS:

- Collect five rocks with your child.
- Write on each rock a number from 1 to 5 and place them in a container.
- Have your child take one rock from the container, call out the number on it and look for nature items that match with that number. For example, if the rock had "2" on it, they will collect two leaves.
- Place the items on the tray with the rock.
- Take turns looking for the nature items.

[Click here](#) for more activities

### JK/SK (4 – 6 YEARS)

#### RANDOM NUMBERS

##### MATERIALS:

- Sidewalk chalk
- Timer

##### DIRECTIONS:

- Draw a long line on the sidewalk.
- On the line, write numbers in order from 1 to 10 using big steps to measure spaces between them.
- Set the timer for one minute and call out random numbers.
- Encourage your child to quickly find each number and stand on it.
- Keep count of how many correct numbers your child finds until time is up.
- Take turns playing this game.
- To make this game more challenging, mix up the order of the numbers on the line.

[Click here](#) for more activities.

### SCHOOL-AGERS (6 – 12 YEARS)

#### MATH WINDING PATH

##### MATERIALS:

- Dice
- Sidewalk chalk

##### DIRECTIONS:

- Draw a winding path.
- Divide the path into spaces.
- Ask your friends or family members to think of different math equations.
- Fill each space on the path with one math equation.
- One player will roll the dice and move the number of spaces indicated on it. You can jump, skip, or twirl to the space.
- Solve the equation on the space that you stand on.
- If you get the answer right, roll the dice again and continue the same process to move forward.
- If you get the answer wrong, you have to go back to the beginning and start over again.

[Click here](#) to read "The Benefits of Taking Math Outside".



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#### A TIP FOR TODAY

- Use loose natural materials like stones, flowers, sticks, etc. to encourage counting, sorting and creating shapes.
- Notice and identify patterns and shapes in nature, on buildings, street signs, etc.
- Practice measurement using non-standard measures such as steps, arm lengths, rope, etc.
- Ask open-ended questions related to various aspects of mathematical learning when your child plays outdoors.