Get a Move On: Movement-Infused Math for PreK and Kinder

Dr. Carrie S. Cutler, University of Houston

www.carriecutler.com

DrCarrieCutler@gmail.com

YouTube: Carrie Cutler

Hello, Neighbor Welcome Song

Hello, neighbor, what-a ya say? (wave hello)

It's gonna be a happy day. (jump and give high five)

Greet your neighbor and boogie on down. (twist and bend knees)

Give 'em a bump and turn around. (bump hips together and turn and face a different person. Repeat.)

If You Love Math (tune of If You're Happy and You Know It)

1. If you love to count to 3, clap your hands. [clap, clap, clap]

If you love to count to 3, clap your hands. [clap, clap, clap]

Doing math is so much fun. Learning til the day is done. If you love to count to 3, clap your hands.

- 2. If you love to play with shapes, turn around.
- 3. If you love to find "how long," jump up high.

Not Sure What Math to Teach?

Texas Prekindergarten Guidelines for Mathematics (English) (Spanish) (Vietnamese) Kindergarten Texas Essential Knowledge and Skills for Mathematics (English) (Spanish)

Counting and Number Movement Tasks

Make Four Elbows!

Materials: none

Instructions: Children form a circle and begin slowly walking in one direction. At a signal from the leader, they stop and listen to instructions. When the leader states, "Make four elbows," the children touch one or both of their elbows to other children's elbows to make a total of four connected elbows. Each group then shares their methods for accomplishing this task. Other directions might include: make 12 fingers, make four knees, and make 12 fingers.

Swat a Number

Materials: fly swatter, die programmed 0-5 (can be differentiated based on age/experience), cards numbered 0-5 Instructions: Child rolls die, counts the pips, the uses fly swatter to swat the correct card. Can be done with a partner where one rolls and the other swats.

Newspaper Ball Toss

Materials: bucket (or empty trash can), newspapers

Instructions: Assign a child a number of balls to make from wadded up newspaper. Child takes three big steps from bucket and tosses the balls. Have child count how many land IN and how many land OUT. Repeat several times. Record the results on a t-chart labeled In and Out. Vary the number of balls to provide differentiation.

Counting Sequence Scarf Movement

Materials: bandanas, scarves

Instructions: Count how many times you can toss it up and catch. Toss to a friend. Toss and see how many times you can clap before catching. Juggle.

Velcro Ball Count and Catch

Materials: whiffle ball covered with Velcro patches, one fabric glove

Instructions: Toss and count.

Serving Tray Pom Pom Toss

Materials: serving tray labeled with numbers, shapes, dice patterns, pom poms

Instructions: Child takes three steps back and tosses a pom pom, runs up to tray, tells which section the pom pom landed in.

Dice Roll Movements

Materials: Label a die (or make a large one) with movements. Regular dice.

Instructions: Children toss both dice. Partners or whole class do the movements the given number of times.

Parachute Bounce Counting

Materials: parachute, pom poms, classroom items

Instructions: Place pom poms on parachute. Count to ten while shaking the pom poms off. Lay parachute down and count how many pom poms are still on the parachute.

Number Bonds for 10

Materials: Linker cubes, name tags labeled 0-10.

Instructions: Make a stick of ten linker cubes. Place on front table. Give each child a name tag with number 0-10. Child makes stick to match their number. Children walk around room and find partner whose number sums to 10. Children double check by comparing their stick to the stick on the front table.

Count, Clap, Jump Bags.

Materials: baggies numbered 1-20, pom poms, hula hoop

Instructions: Child chooses bag. Reads the number. Claps that number of times. Jumps that number of times. Runs & counts out correct number of pom poms. Puts them in bag. Next child's turn.

Geometry & Spatial Reasoning Movement Tasks

Positional Words Indoor Obstacle Course

Materials: obstacle course made of crepe paper, string, etc

Instructions: Children tell if they are going under, around, between, over, and through the obstacles.

Positional Words Miniature Golf

Materials: recyclables for golf course, pool noodle putter, light-weight ball

Instructions: Children move ball under, around, between over, and through the course.

Hokey Pokey Shapes

Materials: cut out shapes for each child

Instructions: Children identify shapes as they sing, "You put your triangle in. You put your triangle out..."

Construction Flagging Shapes

Materials: construction flagging available at Lowes and Home Depot

Instructions: Work as a whole class or in small groups to make 2D and 3D shapes with the flagging.

Shape Hunt

Materials: square sticky notes, rectangular address labels, circular stickers

Instructions: Children hunt for squares, rectangles, and circles and mark them with the correct sticker or sticky note.

People Hunt

Materials: kids

Instructions: Children search for a partner with the same color shirt, different color of hair, etc.

Measurement Movement Tasks

Show and Tell Measuring

Materials: pan balance, small items from child's home, such as a can, spool of thread, toy, pen, jar, cap, stuffed animal, or coffee mug

Instructions: Have each child try to find another student who brought an item that is about the same length. Then have them find another student who has an item that has about the same weight. Use a balance scale to check.

You Are Not Small Comparing Activity

Materials: You Are Not Small by Anna Kang or another book where one character is compared in size to other characters, photocopy of the character

Instructions: Using a paper creature like the one in the book, have children find and share examples of classroom objects that are bigger and smaller: "This __ is bigger/ smaller than the creature." Children can record on a t-chart labeled BIGGER and SMALLER by drawing a picture or actually laying the object on the t-chart.

Shoe Comparisons

Materials: each child removes one shoe, sentence strips labeled SAME LENGTH, SHORTER, and LONGER Instructions: Lay the sentence strips on a table. Children hunt for objects that are longer or shorter than their shoe and place them in the correct category. For an added challenge, find something that is exactly the same length as your shoe!

Wind Up Toy Race

Materials: wind-up toys, unifix cubes

Instructions: Children make a race track by connecting cubes to make two long sticks. Have each child wind three twists on the toys and set them down. See which toy goes the farthest. Children can compare the distances visually or by counting how many cubes the toys went past.

Sorting & Patterning Movement Tasks

Parachute Color Sorting

Materials: parachute, classroom objects

Instructions: Have children find objects in the classroom to place in each of the colored sections of the parachute. This can also be done on a colorful rug.

People Patterns

Materials: kids

Instructions: Children arrange their bodies in order to make a pattern. For example, boy/girl, glasses/no glasses.

Pattern Dance

Materials: kids

Instructions: One child is the leader and chooses three movements to create an ABC pattern. The rest of the class joins in.



Many of these teaching ideas can be found in *Math-Positive Mindsets: Growing a Child's Mind without Losing Yours* (Cutler, 2020). The easy-to-follow Q&A format tackles more than 100 of the most perplexing questions about helping children with math from preschool to fifth grade. For parents, teachers, and coaches. You can order the book on Carrie's website. www.carriecutler.com

All the videos shown today are available on Carrie's YouTube channel.