



## MOVE TO LEARN CURRICULUM

Move to Learn is an opportunity to engage with families, and share about the many ways early math concepts show up in our everyday lives, such as movement! This curriculum will guide you through the particulars of hosting a Move to Learn event. Feel free to adapt the materials based on your space, age of children, and needs of families. The key is to incorporate early math concepts into movement-based activities and to have fun!

### GOALS

- Engage families in a joyful, creative environment.
- Increase children's and caregivers' comfort with math concepts.

### OUTCOMES

- Caregivers will develop familiarity and comfort using math language with children.
- While exploring a variety of movements, children will discover:
  - Basic shapes
  - Weights & measures
  - Numbers & quantities

## EVENT AT A GLANCE

### WELCOME | CIRCLE TIME | ACTIVITY INTRODUCTION 5-15 min

*Welcome families! As they enter, assign each family to one of three shapes of your choosing for the stations they will visit later. Gather all families for a warm-up, introduction to simple math language, and movement stations.*

- Welcome families with songs and rhymes
- *Optional:* Read a book about movement (*see suggested book list or use one of your own*)
- Introduce the movement stations
  - Introduce early math concepts
  - Introduce movement materials

### MOVEMENT STATIONS 25-30 min

*Invite families to explore the movement stations. Families were assigned one of three shapes at the start of the day. All families of the same shape will move through the stations, together.*

- Families will move to their assigned station
- Families will explore the materials and movement activities at their assigned station
- Encourage adult caregivers to guide the activity, using the math language and movements modeled during circle time and the introduction to stations
- Facilitator(s) will mingle and continue to model using math language

## FREE MOVEMENT | CLOSING 10 min

Invite families to come back together and reflect on the activities and what they learned. End the day with music of your choosing, and invitation for families to move freely.

- Ask adults and children to reflect on the movement activities
- Families enjoy free movement time

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## WELCOME & CIRCLE TIME

### Welcome (5 min)

**Facilitator:** Welcome families as they arrive for the Move to Learn event! Assign each family to one of three shapes (circle, triangle, and star, for example). Families will be grouped with others assigned to the same shape later on in the day!

### Circle Time

**Facilitator:** Gather all families together for circle time and welcome them to Move to Learn! Begin with a welcome song like “Hello, Hands,” “Bubble Count,” or “Zoom, Zoom, Zoom” and a book about movement (see suggested book list or use one of your own). See suggested song list for more ideas, and/or use songs and rhymes that work for your community, these are only here to get you started.

#### Hello, Hands!

Hello, two hands – good bye, two hands  
Wave hands, then hide hands behind your back  
Hello, two hands – good bye, two hands  
Wave hands, then hide hands behind your back  
My two hands are feeling very shy  
Hand remain hidden behind your back...  
But now, they’re feeling better!  
Wave them vigorously

*Repeat with hello two elbows, two knees, two shoulders, one tummy, etc. and finish with hello, face! Children can call out their ideas too to extend the rhyme.*

#### Bubble Count

1 bubble, 2 bubbles, 3 bubbles, top (*point up*)  
4 bubbles, 5 bubbles, 6 bubbles, hop (*hop*)  
7 bubbles, 8 bubbles, 9 bubbles, pop (*clap*)  
10 bubbles float down, time to stop (*slowly sit down*)

#### Zoom, Zoom, Zoom

Zoom, zoom, zoom, we’re going to the moon  
Zoom, zoom, zoom, we’re going to the moon  
If you want to take a trip,  
climb aboard my rocket ship  
Zoom, zoom, zoom, we’re going to the moon  
5, 4, 3, 2, 1 Blast off!

Far, far, far, we’re going to a star  
Far, far, far, we’re going to a star  
If you want to take a trip,  
climb aboard my rocket ship  
Far, far, far, we’re going to a star  
5, 4, 3, 2, 1 Blast off!

Fun, fun, fun, we’re going to the sun  
Fun, fun, fun, we’re going to the sun  
If you want to take a trip,  
climb aboard my rocket ship  
Fun, fun, fun, we’re going to the sun  
5, 4, 3, 2, 1 Blast off!  
Too HOT!

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## ACTIVITY INTRODUCTION

### **Introduce the Movement Stations (5-10 min)**

**Facilitator:** *Math is EVERYWHERE when we move our bodies! Once you pause to look for it, you'll find so many ways to learn about numbers, shapes, and patterns when you're dancing, playing, jumping, walking, and stretching together!*

#### **Introduce relationships between movement and math**

Here are some ideas. Feel free to introduce one or two, and/or incorporate ideas the group comes up with themselves!

- *Let's find out how everyone likes to move!*
  - Example: Who likes to skip? Raise your hand or skip to the middle. Let's count how many of you like to skip!
  - Repeat with as many types of movements you wish or can think of!
- *Consider a graphing activity.* Invite *all* family members to vote on their favorite ways to move, and create a graph together using stickers or by coloring in a bar chart.
- *Ask for volunteers. Let's count them together, and then line them up shortest to tallest!*
- *How can we make our bodies really big? Really small?*
- *Who can make a circle with their hands? How about a triangle?*
- *See – movement and math are all around us!*

#### **Introduce Station #1 – Basic Shapes**

**Facilitator:** Today, you will get to explore movements and math at three different stations. At each station are some really fun materials to help you! Station #1 is all about basic shapes.

- There are shapes on the floor that make a pattern. Each shape represents a different movement.
- *Facilitator note:* each shape has two different movements – one more challenging than the other. Feel free to demonstrate one, or both, movements, and invite the children to practice them together.
  - Circle = Twirl (body/arms) or tuck and roll
  - Square = Touch toes or crab walk
  - Footprints = Butterfly pose (sitting down, bottoms of feet together) or inchworm (hands and feet on the ground making a downward dog yoga pose, walk hands out, walk feet in, walk hands out, etc.)
  - Star = Star shape (standing with arms and legs stretched out) or star jump
  - Hands = wild/choose your own
- For example: When you get to the circle, you twirl. When you get to the square, touch your toes. When you get to the hands, do any movement you want! Have fun and it's okay to be silly!
- Once you finish the movement at one shape, move to the next!
- At some shapes, there is a number next to it. Like this one! This tells us how many times to do the movement.
  - Example: I have a circle and a 3. This means I'll twirl 3 times!
- Don't worry if you forget what to do! There is a poster here to remind you!

### **Introduce Station #2 – Weights & Measure**

**Facilitator:** Now let's move to the next station. Station #2 is all about weights and measures. Here you will get to play bean bag toss!

- Each family will grab one set of bean bags. Then stand apart.
- Toss the bean bag back and forth. When you each catch it. Take a step back!
- Adults in the room – help your child explore different math concepts.
  - For example: Count how many catches in a row you can get together! Ask your child if some bean bags are heavier or lighter?

### **Introduce Station #3 - Numbers and Quantities**

**Facilitator:** Now let's move to the last station. Station #3 is all about numbers and quantities. Here you will get to play with movement dice!

- Each family will grab one set of dice. One will have numbers, the other movements.
- Roll both dice!
- I just rolled a 3 and a jump. So, I will jump 3 times!
- Keep rolling your dice. If you roll all the numbers, or all the movements, maybe you can try creating a sequence by rolling the dice a couple of times, and doing a series of movements all in a row.

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## **MOVEMENT STATIONS**

### **Movement Stations (8-10 minutes/station)**

**Facilitator:** Now we are going to explore these materials together!

- Remember how you were assigned to a shape at the start of the event? You will move through the movement stations with the families assigned to the same shape.
  - For example: All families assigned 'Triangle' will start at station #1, and then move to stations #2 and #3 together.
- Assign each shape to a station, and invite families to get started!
- After 8-10 minutes, invite families to move together to the next station
- *Optional:* Play music while families are exploring the stations. When the music stops, this is the cue to move to the next station.

### **STATION #1 – BASIC SHAPES**

**Activity:** Shapes Circuit

**Materials:** Rubber shapes and number cards

- Place rubber shapes in line, circle, square, or any pattern that makes a shape
- Each shape represents a movement. Movements have been assigned to shapes, one more challenging than the other. Use your best judgement when introducing the shapes and/or give families the choice to explore the movement comfortable to them.
  - Circle = Twirl (body/arms) or tuck and roll
  - Square = Touch toes or crab walk

- Footprints = Butterfly pose (sitting down, bottoms of feet together) or inchworm (hands and feet on the ground making a downward dog yoga pose, walk hands out, walk feet in, walk hands out, etc.)
- Star = Star shape (standing with arms and legs stretched out) or star jump
- Hands= wild/choose your own
- Invite families to move through the shape pattern, exploring the movements together!
- To add a step, place a number card next to each shape. As a family arrives at the shape, they do the movement assigned to the shape as many times as the number card says.
- If families move through the station quickly, invite them to put the shapes in a different order, reshuffle the number cards, or race a family member through the circuit.

**FACILTIATOR TIPS:** If families move through the Shapes Circuit quickly, and/or need alternative math and movement activities to explore, here are some ideas!

- **Shape Buckets or “Placemat”**
  - Line up children on one end of the area or room
  - Provide each child with a bag of shapes
  - Place shape-buckets or “placemat” with shape at the other end
    - *Shape buckets can be any sort of container with a shape drawn on/taped to the front, or the buckets can be shapes themselves*
  - Invite children to select a shape from their bag and find the matching shape’s bucket or placemat on the other end
  - The adult can:
    - Call out which shape to search for in their bag
    - Suggest different movements to get to the other side: twirl, run, 1-leg jump, etc.
  - Repeat until all shapes from the bags have found their homes
- **Shapes Yoga**
  - Provide families with the Move to Learn Yoga Cards
  - Invite families to try the yoga movements and explore some math themes
    - For example: Let’s try downward dog! What shape does our body make?

## STATION #2 – WEIGHTS & MEASURE

**Activity:** Bean Bag Toss

**Materials:** 2-4 bean bags per family, measuring tape (*optional*)

- Measure a distance to stand apart from a partner (i.e. one foot or one floor tile). Toss the bean bag back and forth. If both tosses are a “catch,” take a step back (i.e. one foot, one floor tile, etc.). See how far apart you can get and still have a successful toss and catch!
  - How many catches in a row can you get? Let’s count together!
  - Is one bean bag heavier or lighter?
  - Count sides of the shapes

**FACILTIATOR TIPS:** If families move through the bean bag toss quickly, and/or need alternative math and movement activities to explore, here are some ideas!

- **Bean Bag Count & Sort**
  - Arrange the group in a circle and distribute the bean bags.
  - How many bean bags does each person have?
  - Sort the bean bags – are they all the same color, shape, or weight?

- How many are the same color? How many are the same shape?
- Lay some rubber shapes on the ground – can we put the bean bags with the matching color or matching shape?
- **Human Balance**
  - Choose one person to be the “human balance” and stand with their arms out, palms up. Invite families to stack one bean bag at a time, in one hand or the other, on the human balance. The human balance will show how the two sides compare in weight by moving their hands closer to, or farther away from the floor.
    - Which side is heavier? Which side is lighter?
- **Weights and Measures without Materials**
  - Play some music. Invite families to move like they’re heavy. Move like they’re light!
  - Pick a “start” and “end” point. Example: start at one wall and end at the edge of the carpet. Invite one person to pick how the group will move from start to end, and count the number of movements.
    - Example: Leap from start to end!
    - How many leaps did it take a child? How about an adult?
    - Take turns picking different movements to get from the start to the end.

## STATION #3 – NUMBERS & QUANTITIES

### Activity: Movement Dice

**Materials:** A pair of dice for each family – one dice with numbers and one with movements

- Invite each family to get a set of dice
- Count the number of dots facing up on the dice – this is the number of movements you will do
- What are the movements on the dice?
- Roll both dice – do the movements the number of times the dice says!
- *Optional:* For older children, invite them to choose what movements to do with each number ahead of time. For example: If the dice lands on 1, let’s do 1-star jump! If the dice lands on 3, let’s do 3-jumping jacks!

**FACILTIATOR TIPS:** If families move through the Movement Dice quickly, and/or need alternative math and movement activities to explore, here are some ideas!

- **Wiggle Worm**
  - Provide the group with pictures of numbers, shapes, and wiggle worms
  - Invite one person in the group to lead the activity, and tell the children, “Let’s play Wiggle Worm!”
  - When you see a number – let’s count to that number together!
  - When you see a shape – let’s use our bodies to make the shape!
  - When you see the ‘Wiggle Worm,’ do your favorite dance move!
  - Ready? Let’s go!
- **Hokey Pokey**
  - Invite all family members to put color dots, shapes, or number stickers on their head, tummy, hands and feet.
  - Then sing Hokey Pokey together!
  - Instead of using ‘right hand’ say ‘put your triangle in,’ ‘put your triangle out’

- **Numbers and Quantities without Materials**
    - Play any music and invite families to move/dance freely. When the music stops, everyone freeze in a fun pose. Then, count together up to a different number before unfreezing and starting the music again.
    - Here's another variation! When the music stops, everyone can FREEZE, MELT to ground like warm ice cream, or make their arms, legs, or bodies, into a SHAPE of their choosing.
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## FREE MOVEMENT & CLOSING

### **Circle Time**

**Facilitator:** Invite all families to come together, and sing a song or rhyme.

- Example: Repeat opening song/rhyme

### **Free Movement (5 min)**

**Facilitator:** The last few minutes of the day are reserved for fun and free movement. Invite families to move freely. Then invite families to integrate elements from each of the stations they just explored.

Here are some ideas:

- Move like you're heavy, move like you're light!
- Move like you're big, move like you're small!
- Choose a movement and hold it for a count to 3, 5 or 10
- When the music stops, everyone can FREEZE, MELT to ground like warm ice cream, or make their arms, legs, or bodies, into a SHAPE of their choosing.
- Move freely. Then call out a number. Everyone gets into small groups based on the number.
  - Example: 3! Everyone gets into groups of 3!

### **Reflection (5 min)**

**Facilitator:** Invite all family members to reflect on the activities and math concepts they explored. Then thank families for coming to Move to Learn!

- What was your favorite movement or activity?
- How will you introduce early math and movement at home?
- Consider revisiting the graphing activity you did during the introduction. For example, invite *all* family members to vote on their favorite station or favorite movement.