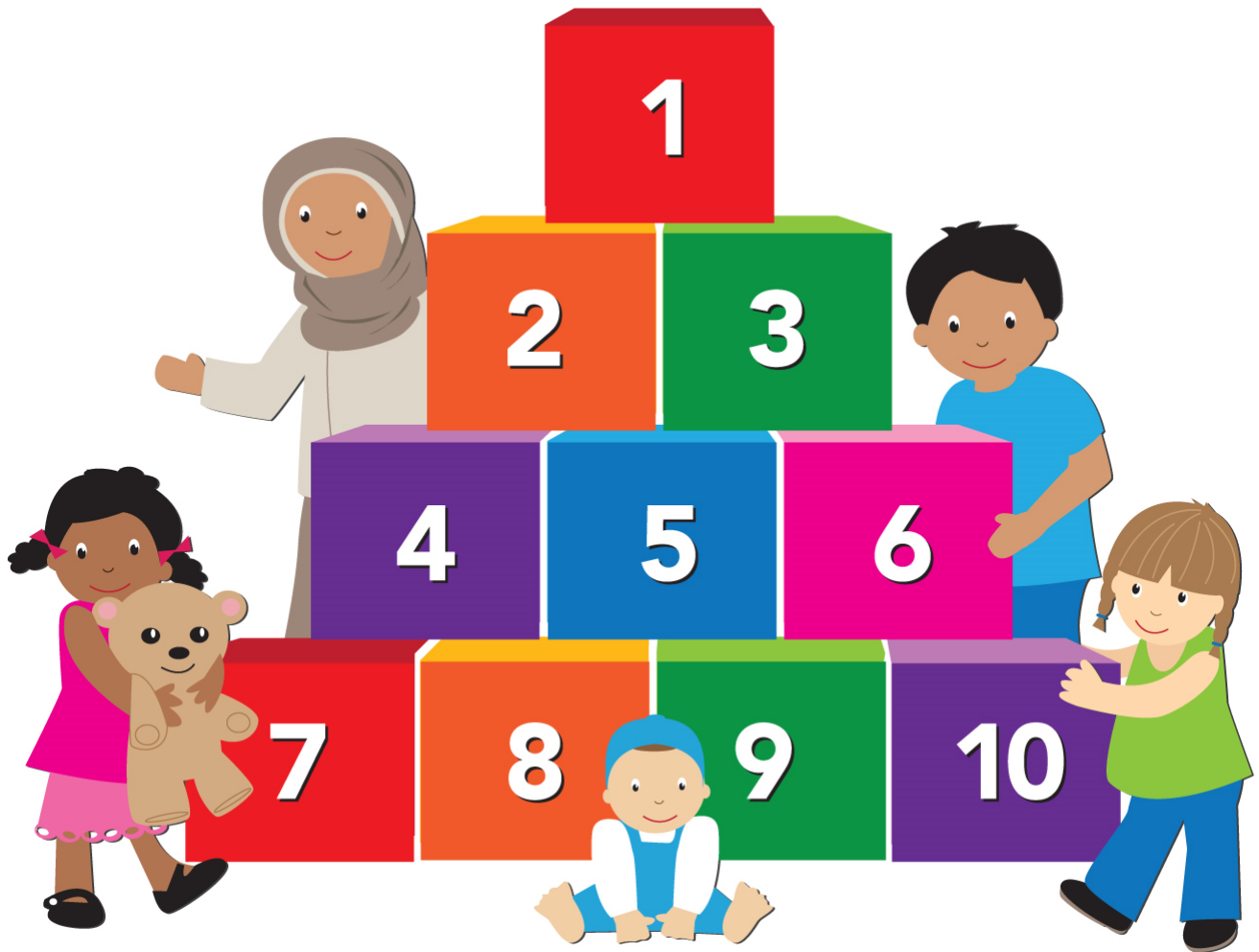


Numbers Help Me Count



Growing. Playing. Learning.



Keep in mind that any materials you might need a little bit more time to gather are featured in red.

Get Ready!

Locate plastic numerals and letters as well as calculators and a toy cash register. See the Materials List for more items to gather/prepare. Have the children wear clothing with numerals on DAY 10.

Numerals are everywhere! From license plates to phone numbers...we all use numerals every day. Our next unit, "Numbers Help Me Count" exposes children to the concept that numerals are a big part of our world and then expands upon that knowledge. The children will not only begin to recognize numerals, they will also practice counting skills, putting numerals in order, making sets and much more. Of course, you will want to adapt and modify the experiences to address the developmental levels of the children in your group.

The activities included in this guide are merely a starting point and not an "end all." Please incorporate your own activities and experiences you believe the children would enjoy and adapt those in this guide to better meet the unique needs of the children in your care. Be sure to use the Individualization Web, Customized/Individualized Lesson Planning Sheet & Connecting the Dots component to adapt and modify the experiences in this unit to meet the unique needs of each child.

Don't forget to email or send home a copy of the Family Letter with each child as you begin this unit. In addition, email or text the Digital Family Notes when you believe they would be the most beneficial. Most importantly, have fun!

Table of Contents

10 Day Planning Grid.....	3
Daily Lesson Plans (2 pages per day, 10 days).....	4-23
School-Age Activities.....	24-26
"Can You Find the Numerals?" Story Prop Prep Directions & Text.....	27-29
Make It! Sheets Directions.....	30
School Readiness Experiences (for older preschoolers).....	31
Learning Indicators Addressed by Activity.....	32-33
Book List/Songs/Poems/Extras.....	33-35



Program Symbols for Developmental Areas

 = Language Development

 = Literacy Knowledge

 = Math Knowledge

 = Science Knowledge

 = Logic & Reasoning

 = Social Studies Knowledge

 = Social & Emotional Development

 = Music & Creative Arts

 = Physical Development & Health

 = Approaches to Learning

Get Moving!

Activities with this icon help you address the goals of the Let's Move! Child Care campaign (www.letsmove.gov).



Activities with the sunshine icon may be done outdoors if you desire.



This icon helps you quickly locate some of the activities that address Character Education included in this unit

2 Week/10 Day Planning Grid

All the daily experiences are included on this grid so you know EXACTLY what is planned for each day.



DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<p>Exploring Together: The Counting Tree (p.4)</p> <p>Center/Small Group: Creating Art & Counting (p.5)</p> <p>Center/Small Group: "I Like Counting" - An Action Song (p. 5)</p> <p>Infants: Counting Book Fun (p. 5)</p>	<p>Exploring Together: Bounce & Count (p. 6)</p> <p>Center/Small Group: Read & Count (p. 7)</p> <p>Center/Small Group: Count & Freeze Game (p. 7)</p> <p>Infants: 1, 2, 3, 4, 5 (p. 7)</p>	<p>Exploring Together: Super Sets (p. 8)</p> <p>Center/Small Group: Name, Move, Count (p. 9)</p> <p>Center/Small Group: Creating with Sets (p. 9)</p> <p>Infants: Sponge Set Fun (p. 9)</p>	<p>Exploring Together: Numerals Are... (p. 10)</p> <p>Center/Small Group: Press 'N See (p. 11)</p> <p>Center/Small Group: Follow the Numerals (p. 11)</p> <p>Infants: Sing It Again (p.11)</p>	<p>Exploring Together: Finding Numerals (p. 12)</p> <p>Center/Small Group: My Own Numeral Detector (p. 13)</p> <p>Center/Small Group: Numeral Exploration Station (p. 13)</p> <p>Infants: Sensory Numerals (p. 13)</p>
DAY 6	DAY 7	DAY 8	DAY 9	DAY 10
<p>Exploring Together: Numeral Walk (p. 14)</p> <p>Center/Small Group: License Plate Fun (p. 15)</p> <p>Center/Small Group: Digging for Numerals (p. 15)</p> <p>Infants: Numeral Fun (p.15)</p>	<p>Exploring Together: Me...by the Numbers (p. 16)</p> <p>Center/Small Group: Dialing Numerals (p. 17)</p> <p>Center/Small Group: How Fast Can You...? (p. 17)</p> <p>Infants: 10 Fingers & 10 Toes (p. 17)</p>	<p>Exploring Together: Cool Calculations (p. 18)</p> <p>Center/Small Group: Calculator Twist Up (p. 19)</p> <p>Center/Small Group: Check Out! (p. 19)</p> <p>Infants: Noisy Numeral Art (p.19)</p>	<p>Exploring Together: How Many? (p. 20)</p> <p>Center/Small Group: Park the Cars (p. 21)</p> <p>Center/Small Group: What Can You Build with...? (p. 21)</p> <p>Infants: Eat and Count (p.21)</p>	<p>Exploring Together: Fun with Numerals Day (p. 22)</p> <p>Center/Small Group: My Numeral Crown (p. 23)</p> <p>Center/Small Group: A Story to Share (p. 23)</p> <p>Infants: Notes & Words (p. 23)</p>

School-Age Activities:

Counting by Tens (p. 24)

Call Me! (p. 25)

Find the Sum (p. 26)

Big, Big, Numerals (p. 24)

Orderly Numerals (p. 25)

Divide It Up! (p. 26)

DAY 1

Unit: Numbers Help Me Count

Today's Focus: We Can Count

Developmental Areas Addressed Today:



Be Healthy & Safe!

Teaching children to put away toys when they are done playing with them helps prevent possible falls and teaches them responsibility.



Teaching Tip of the Day

Greeting children with a smile sets the tone for a great day!

Transition Time

Have the children point out numerals they see when moving from activity to activity today.

Exploring Together: The Counting Tree

(all ages,)

Materials:

- ☐ **"The Counting Tree" Story Props, prepared (see pgs. 27-29 for preparation directions & story text)**

- Counting is an important skill but also one that is best presented in fun, meaningful ways. This experience uses a counting story with props to expose children to the concept of counting. The story includes a lot of repetition and also a "beat." If you want to have the children clap with the rhythm as you say the words, great! As children participate in this experience, they will also build listening skills, make predictions, explore counting in a meaningful way and share ideas with others through actions and words.
- Sit on the floor near the big tree (The Counting Tree) and keep the birds out of sight. You will not need the numeral cards today. As children become curious, invite them to explore the big tree. Point to the words at the top of the tree and read them to the children. Encourage those who are more verbal to predict why they believe this tree is called The Counting Tree.
- Next, use the birds and the text on pages 27-29 to share the story of The Counting Tree. As you add each bird to the tree, pause to see if your more advanced children can identify the number of birds now on the tree before you say the word. If you have ELL/DLL children in your group, you may want to say the number words in both English and their home languages. At the end of the story, invite those children who are more verbal to share what they liked best about the story. If desired, have the children take turns putting the birds back on the tree. Count out loud as a group as they add each bird. You will be using this story prop several times during the unit.
- EXTENSION:** When playing outdoors, have the children look at the trees in your outdoor play space. Are there any birds in those trees? If so, count them together.

Today's Vocabulary

Use some of these words in conversations with children today!

count numbers how much
amount numerals how many

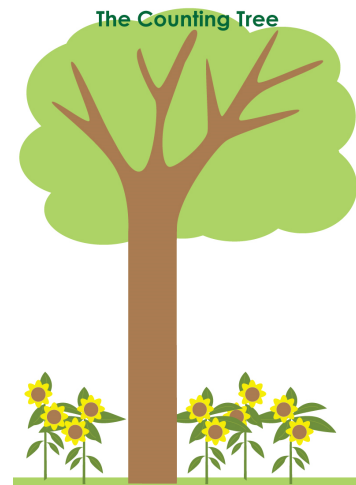


As younger children participate in activities today, model language by...

- Using words such as **numerals, numbers, amount, how much, how many** and **count** as children complete activities.
- Counting the number of colors, items, etc. children use while creating art (p. 5).
- Singing a song about numbers and counting that also involves actions (p. 5).

Questions to Spur Thinking

- Why do you think this tree is called The Counting Tree?
- How many birds were in the tree when it was full?
- How many birds were in the tree when it was empty?
- If we went outside right now and looked up into one of the trees outside, how many birds do you think we might find?



Creating Art & Counting

(Toddlers–4 years, 🗨️ 😊 ❤️ 🧠 🎨 ? 🖐️)

Materials:

- ☐ Construction paper, white paper, paper plates
 - ☐ **Assorted art/collage materials (your choice)**
 - ☐ Crayons/markers, glue/gluesticks
- Art is open-ended and fun! This experience invites children to create art while also interweaving counting. As the children create, you will engage with them and count the number of different colors, materials, etc. they use as they create. In the process, you will expose the children to counting while also helping them build both expressive and receptive language skills. At the same time, the children will build fine motor control, problem-solve and make choices as they create unique works of art.
 - Set out the materials listed above as well as any others you believe the children may have interest in and invite them to create. Remember ... this is art! There is no predetermined outcome and everyone's will look different.
 - As the children create, watch and listen. When you feel the time is appropriate, engage in a conversation with each child. Point to and count the number of different colors/materials the child chose to use to create his/her art. The goal here is simply to expose the children to the concept that things can be counted.
 - Advanced Preschoolers: Challenge these to count the number of colors/materials they chose to use to create their art on their own. Is this a task they are able to do? Do they need prompting or "hints?" Now would be a great time to record an anecdotal note about each child's ability in this area.

Counting Book Fun

(Infants, 🗨️ 🧠 😊 🧠 📖 🖐️ ❤️)

Materials:

- ☐ 2-3 counting books (preferably board books, see Book List, p. 33 for suggestions)
- Infants are a long way from being able to identify numerals. That does not mean, however, that they are too young to expose them to the concept of counting and numerals through books. Reading to infants is just as important as reading to older children.
 - Hold the infant in your lap and have 2 or 3 counting books near. Watch to see which book seems to capture the infant's interest and then pick that book up to explore. Remember... when reading to infants, it is just as important to talk about what is happening in the pictures than it is to read the words. Also, if the infant is older, invite him/her to help you turn the pages. Book handling skills and fine motor control can both be reinforced in this way.

DAY 1 - Center/Small Group Activities

Questions to Spur Thinking

- How many different colors/materials do you think you used in your art? How could we find out?
- What did you like most about this song?
- When might your (mom/dad/grandma...) count something?



Get Moving!

"I Like Counting" - An Action Song

(Toddlers–4 years, 🗨️ 🧠 🧠 🧠 ? 🎵 🌍 🧠 😊)

Materials:

- ☐ None needed
- This activity gets the children moving while exposing them to counting skills. As the children participate, they will also engage in dramatic play, build gross motor skills and demonstrate self-regulation (e.g., respect for other's personal space).
 - Start singing the song, "I Like Counting" (p. 34) and as children show interest, invite them to join you. As you sing the song, challenge the children to participate in the motions. Adapt and modify for children with limited gross motor control and/or children who are just not developmentally ready yet. All you need to do is change the words accordingly. We've provided some options on p. 34.
 - Toddlers/Twos/Threes: Focus on very simple actions like clapping hands. Also, be sure to count out loud as you do each action. You might also want to only go up to the number 5 with this group.
 - Fours/Advanced Preschoolers: These children should be able to sing along with the song once they are familiar with the words. They should also be able to count as they do different motions with relative accuracy.

Your Own Activities

DAY 2

Unit: Numbers Help Me Count

Today's Focus: Let's Practice Counting

Developmental Areas Addressed Today:



Be Healthy & Safe!

Hard vegetables, like carrots, should be steamed until they are softened to prevent choking.

Teaching Tip of the Day

Offer sand or water play to a child who is upset. Both activities tend to be very calming.

Transition Time

During the day, count with the children to see how many steps it takes them to move from place to place (e.g., "How many steps does it take to go from the kitchen to the bathroom?")

Get Moving!

Exploring Together: Bounce & Count

(all ages,)

Materials:

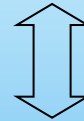
- ☐ The Counting Tree Story Props
- ☐ **Parachute, bed sheet or blanket, soft ball**

- Combining action with counting is a great way to help children really learn the concept. As the children participate in this experience, they will also practice self-regulation, listening and cooperation. Additionally, the children will build fine and gross motor skills, test ideas, make predictions and, or course, practice counting skills.
- Get out The Counting Tree and the birds. As children notice, and show interest, invite them to join you. Can any of your more verbal children describe what the story, "The Counting Tree" is about? Once they share their ideas, use the prop and text on pages 27-29 to share the story. Those children who are more verbal may be able to join in because the story contains a lot of repetition. Again, if you have ELL/DLL children in your group, be sure to say the number words in both English and their home languages.
- After sharing the story, introduce the game, "Bounce & Count." If the weather is nice enough in your area, head outside. If not, just use a smaller blanket/sheet and do the experience indoors. First, have the children spread out and grab on to an edge of the parachute, blanket or sheet. Then, place a soft ball in the center once they help you lift the parachute, sheet or blanket off the floor. Explain to the children that the object of the game is to see how many times they can bounce the ball without it falling off. As the children lift and lower the parachute, sheet or blanket, count out loud and invite your more advanced children to do the same. This is a great game because the children are competing to get to a higher number as a group ... not individually ... which requires cooperation. How high can they go?

Today's Vocabulary

Use some of these words in conversations with children today!

count how many order
+ names of numerals



As younger children participate in activities today, model language by...

- *Using words, such as those listed above, while engaging children in conversations during the day's activities.*
- *Naming numerals children find while exploring counting books (p. 7).*
- *Counting backwards from 10 with the children as they play, "Count & Freeze" (p. 7).*

Questions to Spur Thinking

- *What do you remember about The Counting Tree?*
- *In the story, birds landed in The Counting Tree. What other animals could be in The Counting Tree?*
- *Could we change the story to include different animals/insects? How would we do that?*
- *What number do you think we will count to before the ball falls off?*
- *How close were our predictions?*



Read & Count

(Toddlers–4 years,   ?   1   )

Materials:

- ☐ **Counting/Numeral books (see Book List for suggestions) + cookbooks & “how to” books (e.g., sewing, woodworking, etc.) - Whatever you have on hand.**
- Exploring books is SO important for children...for many different reasons. First, when children have the opportunity to explore books, they build book handling skills, learn that English is read from left to right, and so much more. More importantly, through exploration, children begin to understand that books contain text that provides information.
- Set out the assortment of books and sit back, watch and observe. Note which children choose to explore the books. How do the children handle the books? Now would be an excellent time to record an anecdotal note. If the children ask you to read the books, great! This opens the door for you to talk with children who are ready about letters, letter sounds, words & sentences.
- Toddlers/Twos: Include board books if at all possible. These books are designed for Toddlers/Twos and include thick pages (easier to turn, less likely to rip) and usually simple, bright, colorful illustrations or photos. Skip the cookbooks & “how to” books with this group. Also, if you have ELL/DLL children in your group, be sure to include books in their home languages as well.
- Threes/Fours/Advanced Preschoolers: As these children explore the books, ask plenty of open-ended questions. This will help you evaluate their background knowledge about numerals and counting. If you chose to add cookbooks/“how to” books, engage the children in conversations about how/why numerals are a part of these types of books as well. Do any of their family members use cookbooks?

1, 2, 3, 4, 5

(Infants,   1    )

Materials:

☐ None needed

- Singing to infants is not just a great way to keep their attention, it is also a fun way to expose infants to new language and vocabulary. In this case, because the song is about counting, you will be exposing infants to numbers in a fun way.
- Hold the infant in your lap and sing the following song. If you want to clap together as you sing, great!

1, 2, 3, 4, 5
(tune: “The Farmer in the Dell”)

1, 2, 3, 4, 5,
1, 2, 3, 4, 5,
Counting always is such fun;
1, 2, 3, 4, 5.

DAY 2 - Center/Small Group Activities

Questions to Spur Thinking

- Tell me about the book you are reading.
- If you were going to write a counting story, who would be in the story? What would it be about? Where would it take place?
- When might someone count backwards?



Count & Freeze Game

(Toddlers–4 years,     ? 1 )

Get Moving!

Materials:

☐ None needed

- This experience is going to get the children moving while you expose them to counting ... backwards! Because this game will involve running/moving around, if the weather is nice, plan to play this game outdoors. If the weather is not nice, you can still play inside. Just have the children dance instead of run. Either way, as the children participate, they will build gross motor skills, listen, engage with others and be exposed to counting backwards.
- Who wants to play a game? Pose this question to the children and invite those who show interest to join you. Introduce the game, “Count & Freeze.” Explain to the children that they can run (if outside) or dance (if inside) and then, at some point, you will start counting down from 10 to 0. When you say, “Zero!” everyone should freeze. Adapt and modify depending on the developmental levels of the children in your group. If you are working with ELL/ DLL children, you may want to alternate between counting backwards in English and in their home language.
- Toddlers/Twos/Threes: These children may, or may not, freeze when you get to zero. This is OK! They will learn by watching others play.
- Fours/Advanced Preschoolers: These children should be able to freeze in place when you say, “Zero!” Also, your most advanced children can take turns counting backwards and leading the game. This is a great way to help them build leadership skills.

Your Own Activities

DAY 3

Unit: Numbers Help Me Count

Today's Focus: What is a Set?

Developmental Areas Addressed Today:



Be Healthy & Safe!

Brush teeth after meals and snacks to keep cavities away!

Teaching Tip of the Day

Toddlers do not understand “sharing” yet. To help prevent issues, make sure to have more than one of popular toys for these children to use.

Transition Time

Have the children pull numeral cards from a bag and then clap the matching number of times when moving from activity to activity.

Exploring Together: Super Sets

(all ages, 😊 ♥ 🖐 📖 🔍 ? ① 💬)

Materials:

- ☐ The Counting Tree Story Props
- ☐ Blocks

- Counting is one skill but being able to create a set is a totally different one. During this experience, the children will learn more about what a set is and how to create a set. At the same time, the children will practice counting. In addition, the children will share their ideas with others, make choices and build receptive and expressive language skills.
- Sit on the floor and make a stack that contains 3 blocks. As children show interest, invite them to join you. Point to each block on the stack and count out loud. How many blocks does the stack contain? 3! Explain to the children that you now have a “set” of 3 blocks. Provide additional blocks and invite the children to make sets. They can include as many blocks as they want. Then, count with each child to determine the number of blocks in his/her set. For ELL/DLL children, do this in both English and his/her home language. Also, more advanced children should be able to count the number of blocks in their sets without too much assistance.
- Next, get out the story props for The Counting Tree and invite the children to take turns adding birds to the tree. Each time a bird is added, see if the children can say the number. Then, at the end of the story, talk about the number of birds in the “set” on The Counting Tree.
- **EXTENSION:** During the day, reinforce the concept of sets as the children play and even eat! For instance, if you are serving mixed vegetables for lunch, the children could sort the vegetables and then count the number in each “set.”

Today's Vocabulary

Use some of these words in conversations with children today!

numerals

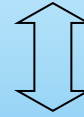
count

set

match

group

members



As younger children participate in activities today, model language by...

- *Using the words above as the children complete the day's activities.*
- *Engaging children in conversations as they create with “sets” of art tools (p. 15).*
- *Naming numerals and counting out loud as children play the game, “Name, Move, Count” (p. 15).*

Questions to Spur Thinking

- *How can we figure out how many blocks are in my stack?*
- *How many blocks do you think are in your stack? How could you find out for sure?*
- *When might adults need to count something?*
- *If we wanted to make one giant set with all the blocks we have, how many blocks do you think would be in that set?*
- *What do you think would happen if you counted the members of a set but you did not say the numbers in the right order?*





Get Moving!

Name, Move, Count

(Toddlers–4 years, ☺ ♥ 🖐️ ① 🔍 ? 💬)

Materials:

- ☐ Paper bag containing 10 cotton balls or small blocks

- Children learn by doing. This experience gets the children moving while they practice counting skills at the same time. In the process, they will enhance listening skills, build gross motor control and practice self-regulation.
- Shake the bag containing the cotton balls or small blocks and invite the children who show interest to join you for a game. Explain that in order to play the game, the children will take turns pulling a handful of cotton balls/blocks from the bag. They will then count the number of members of the set they created and then do an exercise the matching number of times. For instance, if the first child pulls 4 cotton balls/blocks from the bag, the children (and you) would count the members of the set and then do jumping jacks, toe touches, or even hops 4 times. Adapt and modify the experience based on the developmental level of the children in your group.
- Toddlers/Twos/Threes: These children can take turns pulling items from the bag. You will want to point to each item and count it out loud to help this group determine the number of members in the set. Then, choose movements they can do.
- Fours/Advanced Preschoolers: These children should be able to count the members of each set without too much assistance. They can also suggest movements to use in the game.

Sponge Set Fun

(Infants - ♥ 🔍 ☺ ① 🖐️ 💬)

Materials:

- ☐ **New sponge cut into 3 pieces**
- ☐ Shallow pan or plastic tub filled with water
- ☐ Small towel

- Water play is so much fun for infants and while it can be messy, most of the time a small towel is all you need. As infant play with sponges in water, they build fine motor control, eye-hand coordination, use their senses and so much more.
- Put the small towel on the infant's high chair tray and place the shallow pan or plastic tub with water on it. Then, add the 3 sponge pieces. Count as you add each one. Describe what happens to the sponges when they land in the water. Talk about how the sponges look, feel, sound and maybe even smell. As the infant explores, be sure to describe his/her actions as well as what happens when he/she squeezes the sponges.

DAY 3 - Center/Small Group Activities

Questions to Spur Thinking

- *How did you figure out how many members each set had? Did all of the sets have the same amount?*
- *How many art tools did you use in your set?*

Creating with Sets

(Toddlers–4 years, 🖐️ ♥ 🖋️ 🔍 ? 🗑️ ☺ 💬)

Materials:

- ☐ Markers (thick & thin...if available), crayons, colored pencils, colored chalk, **rubberbands**
- ☐ Large sheets of white paper
- This experience combines making sets with creating art! As children choose to participate in this experience, they will also build fine motor control, make choices, test predictions and share observations with others.
- Set out the materials listed above and invite those children who seem interested to create with sets of art tools. To do this, the children will create sets of 2, 3, 4 or even 5 markers, crayons, colored pencils, colored chalk, etc. They will then use these sets to create. See below of adaptations.
- Toddlers/Twos/Threes: These children should be able to pick out the art tools they want to use. You will need to help remove lids (if using markers & put those lids out of reach) as well as bundle the art tools together and then secure with a rubberband. Count out loud as you bundle the art tools and then be sure to use plenty of descriptive language as you engage with children as they create. For ELL/DLL children, do this in both the children's home languages & English.
- Fours/Advanced Preschoolers: These children should be able to create their own sets but may need help with the rubberbands. Additionally, these children can describe how creating with a set of art tools is different from creating with just one at a time. These children may even try to attempt writing their names, letters, syllables and/or words with their art bundles. Now would also be a very good time to evaluate each child's color identification skills.

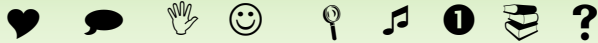
Your Own Activities

DAY 4

Unit: Numbers Help Me Count

Today's Focus: What are Numerals?

Developmental Areas Addressed Today:



Be Healthy & Safe!

Teaching children to put away toys when they are done playing with them helps prevent possible falls and teaches them responsibility.



Teaching Tip of the Day

Greeting children with a smile sets the tone for a great day!

Transition Time

Have the children point out numerals they see when moving from activity to activity today.

Exploring Together: Numerals Are...

(all ages,)

Materials:

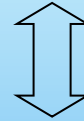
- ☐ The Counting Tree Story Props with numeral cards in a paper bag
- ☐ Music

- Before children can identify numerals, they must understand what a numeral is. Numerals, like letters, are symbols. Building the understanding of what numerals are is the first step in helping children identify them. In other words, if you do not know what a numeral is, how can you identify it or, down the line, use it when doing calculations? During this experience, you will expose the children to numerals as they relate to the story The Counting Tree. Using something familiar will help children connect the dots.
- Shake the bag containing the numeral cards as you walk around the room. Chances are good this will catch the children's attention and they will want to know what is inside the bag. Once the children show interest, have them sit on the floor with you. Turn on music and have the children pass the bag. When you stop the music, the child holding the bag should reach inside, pull out one numeral card to place on the floor. Repeat this procedure until the bag is empty. Then challenge the children to share what they see on the floor. Your more advanced children will probably know that the cards have numerals (or numbers) on them. Encourage those children to identify any of the numerals that look familiar.
- Next, explain that numerals tell us, "how many." To make this concept hands-on, pick up one of the numeral cards and name it for the children (or have your more advanced children do this). Then, clap the corresponding number of times. Count together as you clap and then repeat using a different numeral each time.
- Finally, share the story The Counting Tree. Each time a bird is added to the tree, hold up the corresponding numeral card and either say the name for the children or have more advanced children do this for you. Do this in both English and the children's home language for ELL/DLL children.

Today's Vocabulary

Use some of these words in conversations with children today!

count numbers how much
amount numerals how many



As younger children participate in activities today, model language by...

- Using words such as **numerals, numbers, amount, how much, how many** and **count** as children complete activities.
- Encouraging children to make predictions as they press plastic numerals into playdough (p. 5).
- Naming numerals as children move freely along a Numeral Path (p. 5).

Questions to Spur Thinking

- What do you think is inside this bag?
- What do you hear when I shake it?
- How are the numerals the same? How are they different?
- Which numerals have you seen before? Where have you seen them?
- Why do you think that numerals are so important?



DAY 4 - Center/Small Group Activities

Press 'N See

(Toddlers–4 years, 🗨️ 😊 ❤️ 🙋 📢 ? 🙌)

Materials:

- ☐ Playdough, toy rolling pins (if available)
- ☐ **Plastic numerals**

- This experience continues to expose children to what numerals are and what they look like. Using plastic numerals makes exploring the abstract concept of numerals a little more concrete. At the same time, this experience helps children build small motor control and eye-hand coordination.
- Set out the materials listed above. As children show interest, they can use the materials as desired. The children may choose to flatten the playdough using either their hands or toy rolling pins. Then, they may choose to press the plastic numerals into the dough. The children may choose to use the materials in other ways as well. Adapt and modify as needed. For ELL/DLL children, be sure to name numerals in both English & their home languages.
- Toddlers/Twos/Threes: As these children explore, talk about the numerals they pick up & handle. Name these numerals as a way of exposing these children to the concept of what a numeral is & that each numeral has a name.
- Fours/Advanced Preschoolers: Challenge these children to predict what they will see when they lift the numerals. Additionally, these children might choose to press two numerals (or more) side-by-side to make a larger numeral. See how many numerals this group can correctly identify as they play. You may want to record an anecdotal note during this time as well.

Questions to Spur Thinking

- *What do you think you will see when you lift the (name of numeral)? Were your predictions correct? Why or why not?*
- *What did you like most about this game?*
- *Where might you find numerals in this room? Your home?*



Get Moving!

Follow the Numerals

(Toddlers–4 years, 🙋 🗨️ 📢 ❤️ ? 🙌 🎵 😊)

Materials:

- ☐ **Numerals Path** - To make, either print the numerals 0-10 with sidewalk chalk (if outdoors) OR print numerals on index cards and tape to the floor (indoors). If using cards, use blue painter's tape to attach the cards to the floor after checking to make sure the tape will not damage the surface.
- This activity gets the children moving while exposing them to numerals. Keep in mind that the purpose of this experience is not to have the children name numerals but instead to help them understand what numerals are as well as what they look like.
- As children show interest, invite them to follow the Numeral Path. They can choose to move along the path in any way they would like. There is a song you can sing on p. 33 IF you would like. But this would also be an excellent experience to simply observe. Doing so will help you evaluate each child's gross motor skills, knowledge of numerals and so much more.
- Advanced Preschoolers: These children may be able to identify the numerals they step on as they move along the path. But remember...the focus is truly simply to expose children to what numerals are and not identify them.

Sing It Again

(Infants, 🗨️ 🙋 📢 😊 🎵 🙌 ❤️)

Materials:

- ☐ None needed

- Repetition is very important for infants. Singing a song repeatedly helps infants to build receptive language skills in a meaningful way. Because this song also involves clapping, you can reinforce fine motor control as well.
- Hold the infant in your lap while you sing the song, "1, 2, 3, 4, 5" (p. 7). Clap together as you sing. To add some variation, change the speed at which you sing and clap. One time, sing the song very, very slowly and clap slowly, too. Then, the next time, sing the song very fast and clap fast as well. Which way does the infant enjoy the song more? Repeat the way the infant enjoys the song for as long as he/she shows interest. You can also sing this song during diapering time as well for further reinforcement.

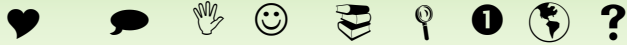
Your Own Activities

DAY 5

Unit: Numbers Help Me Count

Today's Focus: Numerals are Everywhere

Developmental Areas Addressed Today:



Be Healthy & Safe!

Hard vegetables, like carrots, should be steamed until they are softened to prevent choking.

Teaching Tip of the Day

Offer sand or water play to a child who is upset. Both activities tend to be very calming.

Transition Time

Have the children use their "numeral detectors" to look for numerals when moving from activity to activity today.

Exploring Together: Finding Numerals

(all ages,)

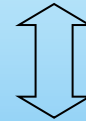
Materials:

- ☐ The Counting Tree Story Props (with numeral cards)
- ☐ **Numeral detector, prepared** - Use the directions on p. 13 to help you make a numeral detector for yourself. The children will make their own later today.
- The purpose of this experience is to expand the children's understanding of what numerals are and where they might be found. You will use the story props plus a game to invite children to seek out numerals in their immediate environment. As children participate in this experience, they will build background knowledge about numerals, share ideas with others, make discoveries and build both receptive and expressive language skills.
- Use your Numeral Detector to look around the room as if you are looking for something. If you find something that contains numerals, act very excited! Chances are extremely good the children will want to know what you are doing and decide to join you!
- Explain that you are using your Numeral Detector to find numerals. Point out one of the items that you found that contain numerals (e.g., microwave, clock, sale flyer, etc.). Challenge the children to help you use your Numeral Detector to find more numerals. Where should they look? How many different numerals can the children find? Are the same numerals on all of the items? If you were using a Numeral Detector at your home, where might you find numerals? Ask lots of questions to engage the children in conversations as they search for numerals with you. Write down where the children find numerals and the numerals they find to add an element of literacy to the experience. After finding lots of numerals, have the children gather to hear The Counting Tree story again. As you did yesterday, hold up the numeral cards as you add birds to the tree. This will further reinforce the concept of numerals as you tell the story.

Today's Vocabulary

Use some of these words in conversations with children today!

numerals print detect
find + names of numerals



As younger children participate in activities today, model language by...

- *Using words, such as those listed above, while engaging children in conversations during the day's activities.*
- *Naming numerals children find when looking at books, magazines or safe flyers (p. 7).*
- *Engaging children in conversations as they create numeral detectors (p. 7).*

Questions to Spur Thinking

- *What item did I find that has numerals on it?*
- *What items did you find that have numerals on them?*
- *Where else could we look for numerals?*
- *How many different things did we find that have numerals in this room?*
- *What types of items do you have at home that have numerals on them?*
- *If we went outside to look for numerals, where might we find them?*



My Own Numeral Detector

(Toddlers–4 years, 🗨️ 😊 ? 📄 ♥️ ① 🔍 🖐️)

Materials:

- ☐ **White paper plates (small or large) with the centers removed (just rims remaining)**
- ☐ Construction paper, tape, child-safe scissors, crayons/markers, glue/gluesticks, tape
- ☐ Old magazines, grocery store sale flyers (**for Toddlers/Twos/Threes, cut out numerals from these ahead of time**)

- The purpose of this experience is to help children build fine motor skills while they practice recognizing what a numeral and, for more advanced children, identifying some of those numerals. In the process, the children will also engage in conversations which will help them to develop language skills. Adapt and modify for different developmental levels. **Keep the detectors handy for use during this entire unit.**
- Toddlers/Twos/Threes: Prepare the paper plates AND attach the rolled construction paper handles ahead of time for this group. Also, cut out assorted numerals from old magazines/sale flyers. These children can choose numerals to glue or tape on to their detectors. As they choose numerals, be sure to name them.
- Fours/Advanced Preschoolers: These children should be able to create their Numeral Detectors on their own. They may choose to make one like you used during the Exploring Together experience or may theirs in a different way. These children should also be able to cut out their own numerals from store sale flyers or old magazines/newspapers. You may also want to suggest these children print their names on their detectors when they are finished creating them. This is an excellent way for them to practice writing their names. Some children may need help with this task and that is totally developmentally appropriate.

Sensory Numerals

(Infants, 🗨️ 🔍 😊 ① 🖐️ ♥️)

Materials:

- ☐ **Zipper-top bag containing water and several plastic numerals** (cover the seal with duct or masking tape)
- Sensory bags, like this one, are fun for infants and even Toddlers/Twos, to explore. They are also great because they encourage infants to use their senses to learn about their world while also helping them to build fine motor control. As you describe the sensory bag and the infant's actions, you will help him/her build receptive language skills as well.
- Put the infant in his/her high chair and place the sensory bag containing the numerals on the tray. Watch to see what the infant does. If the infant wants to pick up the bag and drop it, you may need to use tape to secure it to the tray. Describe the infant's actions as he/she explores the bag and talk about the numerals inside.

DAY 5 - Center/Small Group Activities

Questions to Spur Thinking

- Tell me about your numeral detector.
- Why do you think there are so many numerals in store sale flyers?
- What is the same about all of the items in the Exploration Station? Does your family have any of these items at your home? Which ones?

Numeral Exploration Station

(Toddlers–4 years, 🗨️ 📄 ♥️ 🔍 ? ① 🌐 😊)

Materials:

- ☐ **Numeral Exploration Station** - To prepare, put an assortment of items (safe) that contain numerals in a plastic storage box. Make sure that the battery compartments of any items with batteries are secured with either a screw and/or duct tape. Suggested items include: calculators, old cellphones, toy phones, toy cash register, clock with hands, plastic measuring cups & spoons, etc. **Keep available for entire unit.**
- An exploration station is a wonderful, hands-on way for children to make discoveries on their own. The key to setting up an exploration station is to make sure the items you choose to add are safe for children to handle. This means they should not be choking hazards or have any sharp edges. As children explore, they will also build fine motor skills, engage with others, build vocabulary and utilize their senses.
- Set up the Exploration Station and then sit back and observe. As children choose to explore, watch and listen. This will provide you with keen insight into their level of knowledge of the items added. Be sure to also engage with the children at some point to ask plenty of open-ended questions. Doing so opens the door for back-and-forth conversations and provides you with the opportunity expose children to new ideas and vocabulary.
- Advanced Preschoolers: After these children have had time to explore on their own, be sure to ask questions about numerals. Are they able to identify numerals on items? Can they name any of the numerals they find? Also, challenge these children to compare & contrast the items.

Your Own Activities

DAY 6

Unit: How Many? How Much?

Today's Focus: Numerals Are Everywhere

Developmental Areas Addressed Today:



Be Healthy & Safe!

Inspect decks and wooden play structures frequently for areas that may need sanding. After all, splinters are no fun!

Teaching Tip of the Day

Teaching children to say, "I'll try" instead of "I can't" is a wonderful habit to start at an early age.

Transition Time

Have verbal children name something they saw on their, "Numeral Walk" that contained numerals before moving from activity to activity today.



Exploring Together: Numeral Walk

(all ages,)

Get Moving!

Materials:

- ☐ Each child's numeral detector (p. 13)
- ☐ Your cellphone or a digital camera

- This experience expands upon what the children did yesterday by taking them to another environment that has many different places to find numerals...outdoors! The purpose of this experience is to further develop background knowledge about how, and where, numerals are used. During the course of this experience, the children will build language and vocabulary skills while using their sense of sight to explore. If the weather is not nice enough to take a walk today, you could take the children for a ride instead.
- It's time to take a very special walk...a Numerals Walk! To begin, pass out the children's numeral detectors from earlier (p. 13) and explain that today, they are going to use their detectors to find numerals outside. Before you head out, take time to review the safety rules the children need to remember when taking a walk (or ride in the car).
- Once outside, have the children use their numeral detectors to look for numerals. They might find numerals on your house (house number), car (license plate), street sign, signs in a store window, etc. Encourage the children to point out the numerals they find. More advanced children may be able to identify some of these numerals. Use your phone or a camera to take photos of some of the numerals the children find. Print these out and have the children dictate a caption for each photo before assembling into a book. This adds an element of literacy.
- After returning from the walk, encourage more verbal children to describe some of the numerals they found on their walk. Do they think they would find the same types of numerals if they looked for them in their own neighborhoods? What different numerals might they find? Next, sing the song, "We Found Numerals" (p. 33) and have the children fill in the blank for each verse with the name of an item they found that contained numerals.

Today's Vocabulary

Use some of these words in conversations with children today!

numerals **license plate**

signs **house number**



As younger children participate in activities today, model language by...

- *Using words, such as those above, as children participate in the daily experiences.*
- *Identifying numerals as children discover them in the sand (p. 9).*
- *Describing the numerals (and letters) that appear as the children create license plate rubs OR make their own license plates (p. 9).*

Questions to Spur Thinking

- *Where did you find numerals outdoors?*
- *Why do you think houses have numerals? What about streets?*
- *What numerals do you think you might find in your neighborhood?*
- *What other symbols do you see on the license plate?*
- *If you could make your own license plate, what numerals would you put on it? Why did you choose those?*





License Plate Fun

(Toddlers–4 years,)

Materials:

- ☐ **Old license plates** (cover any sharp edges with masking tape), white paper, **unwrapped crayons**
AND/OR
- ☐ **Large index cards or pieces of thick, white paper cut to that size**
- ☐ Crayons/markers, string/yarn, hole punch
- ☐ Riding toys, tricycles, wagons

- License plates are just one of many items that contain numerals. We are giving you two different options for this experience. Feel free to do one or both! In both experiences, the children will be exposed to numerals, develop fine motor control, share ideas with others and so much more. During either experience, be sure to also talk about license plates on family vehicles.
- **OPTION #1:** License Plate Rubs: Secure license plates to a flat surface with non-marking tape. Then, have the children put white paper on top and rub over with the side of an unwrapped crayon. Before the children begin, encourage those who are more verbal to predict what they will see. Talk about numerals as part of the process.
- **OPTION #2:** Set out the index cards and crayons/markers. Invite those children who show interest to use these materials to create license plates for riding toys. Advanced Preschoolers can talk about the numerals they are using on their license plates. As they create, talk about why license plates are different for different states and different vehicles. Encourage more verbal children to talk about license plates they may have seen in the past. When the children finish their license plates, use small pieces of yarn or string to tie them to the backs of their riding toys. For some toys, you may need to use tape instead. Then, the children can ride on their riding toys that now have the proper identification!

Numeral Fun

(Infants -)

Materials:

- ☐ **Infant-safe toy that contains numerals**

- There are many different infant-safe toys that feature numerals. While the goal of these toys is not to “teach” infants numerals, it is to expose them to what numerals are in a fun, interactive way. Exploring these types of toys also helps infants build small motor skills and eye-hand coordination.
- Sit on the floor and hold the infant in your lap. Put the toy in front of you. Watch to see what the infant does and then describe his/her actions. As the infant explores the toy, talk about it. Does it play music when the buttons are pushed? Does it make sounds? Note the numerals on the toy as the infant explores. This is the perfect time to build vocabulary and receptive language while also promoting the infant-caregiver bond.

DAY 6 - Center/Small Group Activities

Questions to Spur Thinking

- *Why do you think vehicles have license plates?*
- *What did you find in the sand? Where might we find numerals in this room? At home?*

Digging for Numerals

(Toddlers–4 years,)

Materials:

- ☐ **Plastic numerals buried in the sand table, sand box or container of sand OR you could also print out another copy of the numeral cards from the story prop, mount to heavy paper and bury those instead**
- ☐ **Plastic sand shovels, old cooking spoons, sand buckets, sand sifters, etc.**
- Sand play is a wonderful sensory experience for children. Adding plastic numerals opens the door to incorporate an exploration of this concept into sand play in a fun way. As children participate in sand play, they build fine motor control, demonstrate self-regulation, engage with others, utilize their senses, test ideas and so much more.
- Set up the sand play area and bury the plastic numerals (or printed ones) in the sand ahead of time. Add the sand play toys/items listed above or others you have on hand you believe the children would enjoy. Then, sit back, watch, listen and observe.
- As the children discover the numerals, listen to their conversations with each other. Are any of the children able to identify the numerals they find? After watching and listening for awhile, engage with the children by asking open-ended questions. This will help you evaluate each child's level of knowledge about numerals. Remember, right now, the goal is to help the children identify what a numeral is and not necessarily identify the names of the numerals. For nonverbal children, you can describe the numerals the children find to help them build background knowledge.
- Advanced Preschoolers: As these children discover numerals, they may be able to identify some of them. These children should also be able to tell you some of the places they have seen numerals in your program and at home.

Your Own Activities

DAY 7

Unit: Numbers Help Me Count

Today's Focus: Numerals that Relate to Me

Developmental Areas Addressed Today:



Be Healthy & Safe!

When serving prepackaged baby food to infants, make sure to put the food being fed in a dish. Do not feed directly from the container the food came in.

Teaching Tip of the Day

Deep breathing exercises are wonderful for children! Add these to your pre-naptime routine.

Transition Time

Have each child either say his/her age or hold up the corresponding number of fingers before moving to the next activity.

Exploring Together: Me...by the Numbers

(all ages,)

Materials:

☐ **Yardstick or tape measure**

- We all have numerals associated directly with each of us. Our phone numbers, our addresses, our height and even our shoe size are all ways numerals are a part of our individual lives. The purpose of this experience is to help children gain this important background knowledge. During this activity, the children will have the opportunity to also build vocabulary as well as both receptive and expressive language skills.
- Put the yardstick or tape measure on the floor and see how long it takes for the children to ask why it is there. Do any of the children know the name of this measuring tool? Can any of the children find numerals on it? Take a few minutes for the children to explore and then use the yardstick or tape measure to measure each child's height. Write down his/her name and height on a piece of paper. Talk about letters and numerals in the process.
- Next, have each child remove one of his/her shoes. Challenge the children to see if they can find any numerals on their shoes. Help each child locate his/her shoe size. Encourage more advanced children to identify this numeral and also invite them to help younger children. Talk about how our shoe size is another numeral associated with us...just like our height! Can the children think of any other numerals that are associated with them? They may think of their weight, age, birthday, etc.
- Next, sing the song, "(Child's Name) is _____ Years Old" (p. 34). Sing the song one time for each child and have the child say his/her age when you get to that part of the song. For Toddlers, Twos and nonverbal children, you can say the age for them. Then, have everyone clap the corresponding number of times at the end of each verse. If you have ELL/DLL children in your group, you may want to say their age in both their home language and English.

Today's Vocabulary

Use some of these words in conversations with children today!

age yardstick
size height weight



As younger children participate in activities today, model language by...

- *Using words such as those listed above as children participate in today's activities.*
- *Naming numerals and "reading" phone numbers as children play with telephones (p. 11)*
- *Talking with children as they create a simple block graph which compares their ages (p. 11).*

Questions to Spur Thinking

- *Where do you see numerals on the yardstick?*
- *What numerals do you see?*
- *We can use the yardstick to see how tall you are. How many inches tall do you think you will be?*
- *Where do you see numerals on your shoe?*
- *Why don't we all wear the same size of shoe?*
- *What size shoe do you think your (mom/dad/grandma/uncle...) wears?*



Dialing Numerals

(Toddlers–4 years, 🗨️ ❤️ ? 🌍 📞 ① 😊 🖐️)

Materials:

- ☐ **Each child's telephone number printed on an index card**
- ☐ Toy telephones or old cellphones/landline phones
- Learning your phone number is an important life skill that is also a safety skill. The purpose of this experience is to help children understand that their phone number is made from numerals put in a very specific order. During the course of this activity, the children will also have the opportunity to practice patience and persistence as they utilize fine motor skills.
- Add toy telephones and/or old cellphones/landline phones to your dramatic play area. Observe what the children do as they explore the phones. Do they notice the numerals? Instead of leading this experience, watch and listen. This will give you keen insight into what each child already knows about phone numbers and numerals. Here is how different developmental levels might approach this experience.
- Toddlers/Twos/Threes: These children will probably just enjoy playing with the phones. They will more than likely enjoy pushing the buttons which is an excellent way for them to build fine motor control and eye-hand coordination.
- Fours/Advanced Preschoolers: These children may choose to pretend to call their homes using the phone number cards as they play with the phones. If they do, be sure to talk about the numerals that make up their phone numbers. Then, keep the phones and cards out so the children can use them on their own and perhaps even incorporate them into dramatic play. Over the course of time, your most advanced children can be challenged to memorize their phone numbers.

10 Fingers & 10 Toes

(Infants, 🗨️ 📞 🎵 😊 🖐️ ❤️)

Materials:

- ☐ None needed
- Infants love music and songs are wonderful tools for exposing them to new ideas and concepts...such as numerals! This experience uses a song to expose infants to the idea that their fingers and toes can be counted. It also incorporates fine motor development as well.
- Hold the infant in your lap facing you so that he/she can see your mouth moving as you sing the following song. Wiggle the infant's fingers (or toes) as you sing.

TEN FINGERS
(tune: "Ring around the Rosy")

1, 2, 3, 4, 5,
6, 7, 8, 9, 10.
That's how many fingers you have,
On both your hands.

**Sing again using "toes" for "fingers" and "feet" for "hands."*

DAY 7 - Center/Small Group Activities

Questions to Spur Thinking

- Why do you think knowing your phone number is important?
- How many seconds do you think it will take you to run to the tree and back? How close was your estimate?



How Fast Can You...?

(Toddlers–4 years, 🗨️ ? 😊 ① 🖐️ 📞 ❤️)

Get Moving!

Materials:

- ☐ **Cellphone with a stopwatch feature or stopwatch**
- In general, young children are fascinated with "how fast" they can do different things. This experience not only invites them to make predictions and then test them, it also opens the door for you to expose them to numerals in a fun, active & meaningful way. As children choose to participate, they will build gross motor skills, engage with others, make/test predictions and gain exposure to numerals (so of which will be larger).
- How fast can you run? Hop? Ride? Jump? Crawl? These are just a few of the many, many actions the children might choose to do as they participate in this experience. To begin, show the children the stopwatch feature on your cellphone or the stopwatch. Explain how a stopwatch is used and do a trial run with all of the children. Have them sing a familiar song and use the stopwatch to show them how long it took them to finish. Point to the time and read it to the children.
- Next, invite the children to choose different actions to do so you can see "how fast they are." Each child can choose to do something different! Some children may choose to run to a specific location and then back to you. Some may choose to ride on a riding toy. Others may choose to build a sandcastle or paint a picture. For Toddlers, Twos & Threes you might want to simply time as they play and then show them the time on the device.
- Fours/Advanced Preschoolers: Challenge these children to predict how long they believe it will take them to do the task they choose and then compare their predictions to the actual results. These children may want to do an action more than one time to see if they can, "beat their time."

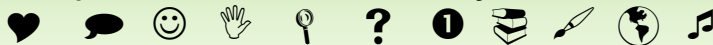
Your Own Activities

DAY 8

Unit: Numbers Help Me Count

Today's Focus: There are Tools That Help People Use Numbers

Developmental Areas Addressed Today:



Be Healthy & Safe!

Many vitamins and supplements can be toxic if consumed in large quantities. Make sure to keep these items locked up and out of the reach of children at all times.

Teaching Tip of the Day

Make music a part of very day!

Transition Time

Have the children sing, "Calculators and Cash Registers" (p. 34) while moving from activity to activity today.

Exploring Together: Cool Calculations

(all ages, ☺ ♥ ? 🔑 ① 🌐 🖐️ 🎵 💬)

Materials:

☐ **Calculator, toy cash register (if you have one)**

- While some people are able to do math "in their heads," many of us rely on tools like calculators and cash registers for help. The purpose of this experience is to expose children to these helpful tools while also building knowledge about when they are used and by whom. This experience provides a wonderful opportunity for building vocabulary as well as both receptive and expressive language skills.
- Sit on the floor with the calculator and the toy cash register. Press the buttons and talk about what you are doing. As children show interest, invite them to join you. Encourage the children to share what they already know about these tools. Does anyone in their family use these tools? Next, invite more verbal children to share what they would like to learn about calculators and cash registers as they explore these tools. During this discussion, point out that both of these tools help people do complex math problems that involve numerals.
- See if your more advanced children can identify any of the numerals they find on the calculator and/or toy cash register. Then, invite the children to share where they may have seen someone using these tools (e.g., at home, in a grocery store, etc.). To help the children gain knowledge about when people use these types of tools and why, sing the song, "Calculators and Cash Registers" (p. 34). The children can take turns pressing the buttons on the calculator and/or cash register as you sing. After singing the song, have the children give you numbers to enter into the calculator to add together. The children can help enter the numerals and press the + and = keys.
- **EXTENSION:** When do you use a calculator? If you need to use a calculator during the day, invite the children to "help" you. This will help them see in a meaningful way how this tool is used.

Today's Vocabulary

Use some of these words in conversations with children today!

calculator **cash register**

add **total** **pay** **sum**



As younger children participate in activities today, model language by...

- Using words such as those above during daily activities.
- Naming numerals as children play the game, "Calculator Twist Up" (p. 21).
- Engaging children in conversations as they use a toy cash register while playing "store" (p. 21).

Questions to Spur Thinking

- What do you know about calculators? Cash registers?
- Where have you seen these tools before?
- Who do you know that uses a cash register? Calculator?
- Why do you think calculators and cash registers are so helpful?
- What do you think would happen at the grocery store if the cash register was not working?





Calculator Twist Up

(Toddlers–4 years, 🖐️ 1 ❤️ 😊 🔍 ? 💬)

Get Moving!

Materials:

- ☐ **Big calculator (including numerals, +, - and = buttons) drawn with sidewalk chalk outside OR created draw with a permanent marker on a shower curtain liner and tape the liner to the floor.**
- The children are sure to have a good time with this active experience! If the weather is nice, the easiest way to do this is with chalk outside on a flat surface like a patio. Otherwise, use a permanent marker to draw large calculator buttons on a shower curtain liner and tape the liner to the floor (so it will not move). During the course of this experience the children will have the opportunity to build gross motor skills, recognize numerals, practice self-regulation and much more!
- Chances are good when the children see the chalk or shower curtain liner “calculator,” they will be very curious. Can they figure out what math tool you made? Help them figure out that it is a calculator. Then, introduce the group game, “Calculator Twist Up.” To play, give each child directions about what to do. For instance you might say something like, “April...please put one foot on the numeral 2 and one foot on the numeral 9.” If you are working with Toddlers, Twos, and/or Threes, you will need to point to the numerals as you say them so they know where to put their feet. As you give the children directions to follow, intentionally twist them up. Eventually, the children will become so twisted, they will probably fall down in a heap of laughter. Repeat, for as long as the children show interest.
- Advanced Preschoolers: Help these children add the numerals together (where their feet are) to discover the sum before they can move.

Noisy Numeral Art

(Infants, 🗨️ ❤️ 🖍️ 😊 1 🔍 🖐️)

Materials:

- ☐ **Plastic numerals, plastic container with a lid**
- ☐ Paint and white paper
- This experience will be noisy but it will be fun! It is also a great way for infants to create art without a lot of mess. In the process, the infant will utilize his/her senses, build fine motor control and explore cause & effect.
- Put a sheet of paper into a plastic container with a lid. Cut the paper to make it fit in the bottom, if needed. Then, give the infant a 2-3 plastic numerals to put in the container. Name each numeral as the infant drops it in. Next, add a small amount of paint (1-2 colors) and secure the lid. Invite the infant to play with the container. As he/she does so, the numerals and paint will create art. Describe the sound the numerals make. Carefully remove the lid, numerals and paper. Talk about the amazing art the infant created.

DAY 9 - Center/Small Group Activities

Questions to Spur Thinking

- *How is this calculator like a real one? How is it different?*
- *Tell me about how you are using the cash register.*

Check Out!

(Toddlers–4 years, 🖐️ ❤️ 1 😊 🔍 🌐 📖 🖍️ ? 💬)

Materials:

- ☐ **Index card price tags** - To make, simply print simple prices (e.g., \$2.00) on index cards. Only go up as high as \$10.00.
- ☐ **Gez Whiz paper money** (p. 35) - Print out as many copies as you think you will need.
- ☐ **Toy cash register**
- The children will have the opportunity to practice counting skills during this dramatic play experience. In addition, they will have the opportunity to build social skills while cooperating and interacting with others.
- Set out the materials listed above and invite watch to see what happens. Some children may choose to create a store where they can buy and sell items or they may choose to use these materials in other ways. If the children choose to create a store, they can also choose what they are going to sell. It might be toys, plastic foods, puzzles, books, etc. Because different developmental levels will approach this experience differently, we are providing options.
- Toddlers/Twos/Threes: These children are not yet ready to assume roles during dramatic play and will more than likely play independently or side-by-side. For these children, just engage by describing the materials they use and how they use them.
- Fours/Advanced Preschoolers: These children may choose to assume roles. Some children might be the shoppers while others could work in the store. The shoppers could use paper money to “buy” items. As you observe, note how the children interact with one another. As you engage with the children, encourage them to talk about stores they visit in their communities and how they use cash registers. Now would also be an excellent time to record an anecdotal note.

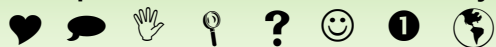
Your Own Activities

DAY 9

Unit: Numbers Help Me Count

Today's Focus: Numerals and Sets

Developmental Areas Addressed Today:



Be Healthy & Safe!

Pink eye is highly contagious! Learn what pink eye is and how it is spread by reviewing this helpful information from the CDC: <https://www.cdc.gov/conjunctivitis/index.html>

Teaching Tip of the Day

Keep a pair of child-safe binoculars outside so children can watch wonders of the natural world like birds and squirrels.

Transition Time

Have more advanced children count out while you clap a specific number of times (1-10). See if they can identify the number of times you clapped. Then, have them move to their next activity.

Exploring Together: How Many?

(all ages,)

Materials:

- ☐ Numeral cards (from The Counting Tree)
- ☐ 10 blocks, crayons, markers, toy cars ... whatever you would like to use for the game (see below)
- Now that the children have had experience with numerals, it is time to connect that knowledge to sets. This experience uses a game to help them make this connection. As children participate, those who are more advanced will have an opportunity to identify numerals. They will provide them with the opportunity to serve in a leadership role. All children will build an awareness of numerals, better understand what a "set" is, share information both verbally and nonverbally and participate with a group.
- Sit on the floor and spread out the numeral cards. As children show interest, invite them to join you. Can your more advanced children identify any of the numerals on the cards? Which ones? Talk about the numerals. Which numeral is the largest? Which is the smallest? Asking these types of questions will help you evaluate the children's level of knowledge about numerals.
- Next, introduce the game, "How Many?" Show the children the blocks, crayons, markers, toy cars or other items you gathered ahead of time. Point to each member of the set and count out loud with the children. They will quickly discover that you have 10. Can the children find the numeral card for 10? Now, have the children close their eyes as you remove some of the items. When the children open their eyes, they must count to discover how many are left and then find the corresponding numeral card. If you have ELL/DLL children in your group, be sure to count in both English & their home language. Replace all the items so the set once again has 10 members and then play again.
- **EXTENSION:** During mealtimes and snacks, have more advanced children count the number of each item on their plates. Have numeral cards handy so they can point out the numerals that match those sets.

Today's Vocabulary

Use some of these words in conversations with children today!

numerals **sets** **count**
discover **match** **how many**

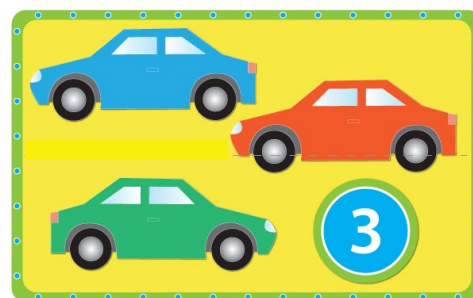


As younger children participate in activities today, model language by...

- *Using the words such as those listed above as during interactions and activities with children.*
- *Talking about numerals and sets while children "park" toy cars (p. 17).*
- *Naming numerals and engaging in conversations with children while playing, "What Can You Build with...?" (p. 17).*

Questions to Spur Thinking

- *What numerals do you see on the cards?*
- *What numeral shows how old you are?*
- *When I took some of the items away, did the set get bigger or smaller?*
- *How could we use these items and the numeral cards to play a different game?*



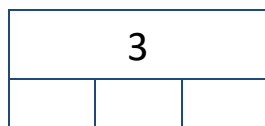
Park the Cars

(Toddlers–4 years, 🗨️ 😊 ❤️ 🍷 ① ? 🌐 🖐️)

Materials:

- ☐ **Park the Cars Learning Center Game** - To make, use sheets of paper to make parking lots. You will need one “parking lot” for each numeral you want to reinforce (see image)

- ☐ Assorted toy cars



- This materials does not take long to create but will be one you can use well beyond this unit. You do not need to reinforce all numerals at one time! Instead, focus on just a couple. As the children play with the cars and “parking lots,” they will not just be exposed to numerals and sets, they will build eye-hand coordination, practice problem-solving and much more.
- Set out the Park the Cars Learning Center Game along with the toy cars and watch to see which children choose this material. You might need to explain how the game works OR the children may figure it out on their own. Because different developmental levels will approach this activity differently, we are providing options.
- Toddlers/Twos/Threes: These children may simply enjoy playing with the cars and have no interest in “parking” them. This is OK! You can still talk about the numerals on the parking lots and also count the number of vehicles the children use as they play.
- Fours/Advanced Preschoolers: These children should be able to “park” cars in the parking spaces on the sheets. Some may also be able to identify the numerals on the sheets as well. Encourage them to compare/contrast the sizes of the “parking lots” as well. Now would be a meaningful time to record information on this area of development for each child.

Eat ‘N Count

(Infants, 🗨️ 😊 🍷 🖐️ ① ❤️)

Materials:

- ☐ **Finger food safe for infants** (e.g., dry cereal pieces, cooked peas, fish-shaped crackers, etc.)

- This experience is obviously for those infants who are eating solid foods. Learning to pick up small pieces of food, like cereal, requires infants to utilize eye-hand coordination, fine motor control and persistence. When you add counting to the process, you expose the infant to numerals and sets in a meaningful way.
- Put the infant in his/her high chair. Put a set of finger food on the infant’s tray such as 5 pieces of cereal or 3 fish-shaped crackers. Watch to see what the infant does. Chances are very good he/she will attempt to eat them! As the infant does so, count out loud. You may want to add additional dialogue such as, “1...2...3...you just ate 3 fish-shaped crackers. Yummy!” This will expose the infant to counting and numerals in a fun, tasty way!

DAY 9 - Center/Small Group Activities

Questions to Spur Thinking

- What happens with all the parking spaces are full?
 - When does your family need to park in a parking space?
-
- Tell me about what you built.
 - Is it easier to build with more blocks or fewer blocks? Why do you think that is?

What Can You Build with...?

(Toddlers–4 years, 😊 ① 🖐️ ? 🍷 ❤️ 🗨️)

Materials:

- ☐ Blocks
- ☐ Numeral cards (from The Counting Tree Story Props)

- This experience will challenge children to connect numerals to sets in a fun way ... with blocks! As children participate, they will also build fine motor control and eye-hand coordination. Additionally, they will have the opportunity to express their ideas creatively. Just keep in mind that different developmental levels will participate in different ways and this exactly the way it should be.
- Sit on the floor with a pile of blocks and the numeral cards from The Counting Tree Story Props. Pick up a numeral card and then count out the corresponding number of blocks. As children become curious, invite them to join in. Adapt and modify for different developmental levels. For ELL/DLL children, be sure to identify numerals in both their home languages and English.
- Toddlers/Twos/Threes: Invite each of these children to choose a numeral card. Identify the numeral and then count out the corresponding number of blocks for these children. Invite them to play with the blocks in any way they would like. Describe their actions.
- Fours/Advanced Preschoolers: These children should be able to choose a numeral and count out the corresponding number of blocks. As the children use their set of blocks to build, encourage them to describe their creations. Repeat, encouraging the children to choose a different numeral each time.

Your Own Activities

DAY 10

Unit: Numbers Help Me Count

Today's Focus: Fun with Numerals Day!

Developmental Areas Addressed Today:



Be Healthy & Safe!

Sharp pencils and pens can be dangerous in the hands of little ones. Make sure to keep these items out of reach.

Teaching Tip of the Day

Touch base with parents/caregivers frequently to keep the lines of communication open.

Transition Time

Sing some of the children's favorite songs from this unit as they move from activity to activity today.



Get Moving!

Exploring Together: Fun with Numerals Day!

(all ages, ☺ ☞ ♥ 🖐 📖 🔑 ① ?)

Materials:

- ☐ **Toys that contain numerals**
- ☐ Book about numerals and counting (see Book List, p. 33 for suggestions)
- ☐ **Clothesbasket, assortment of small balls (soft)**
- ☐ Big calculator (chalk or shower curtain, from p. 19)
- Today is a day to celebrate numerals! If you chose to have the children wear clothing with numerals printed on them, be sure to talk about the numerals the children are wearing. Pick and choose as many of the following experience as you wish to do with the children. Be sure to add your own as well.
- **Toys and Numerals** - Set out an assortment of toys that contain numerals, including puzzles. Feel free to include anything you have on hand. As the children explore the toys, see if they can point out the numerals and, for more advanced children, challenge them to identify those they see.
- **Bounce and Count** – Set out a clothesbasket and some small, soft balls. Invite the children to bounce the balls to make them land in the clothesbasket. Once all of the balls have been bounced, have the children count to discover how many landed in the basket and how many missed. Compare the number that missed & the number that did not.
- **Book Time** – Set out an assortment of books about numerals and counting. As the children look at the books, encourage them to talk about what they see in the illustrations. More advanced children can be challenged to identify the numerals they see in the books.
- **Calculator Twist Up** - Repeat the game, "Calculator Twist Up" from earlier (p. 19).

Today's Vocabulary

Use some of these words in conversations with children today!

numerals **count** **how much**
symbol **calculator**

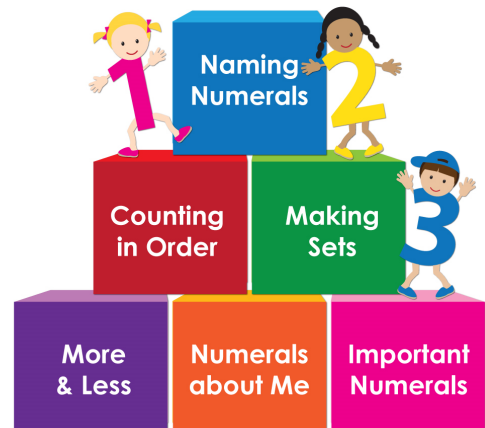


As younger children participate in activities today, model language by...

- *Saying the words listed above as children complete activities during the day.*
- *Listening and asking questions as the children retell the story, "The Counting Tree" (p. 23).*
- *Talking with each child about his/her favorite numerals (p. 23).*

Questions to Spur Thinking

- *What is your favorite numeral?*
- *Where do you see numerals on that toy?*
- *What numerals do you see?*
- *Tell me about the book you are reading.*
- *What other stories can you think of that have numerals in them?*
- *What technique worked best for getting more balls into the basket?*



My Numeral Crown

(Toddlers–4 years, ♥ 😊 🎨 ✋ ① 🔍 ? 💬)

Materials:

- ☐ **Plastic numerals**
 - ☐ **Light-colored prepared construction paper headband for each child** - To make, cut construction paper in half lengthwise and then tape two pieces together, end-to-end.
 - ☐ **Paint-soaked sponges or folded paper towels in shallow dishes** (several colors)
- Making something you can wear is fun for children and an excellent way for them to practice following simple directions as they build fine motor control. As the children participate, they will also be exposed to what numerals are and, for those children who are developmentally ready, the names of those numerals.
 - Set out the materials listed above and as children show interest, invite them to create Numeral Crowns. The children can press plastic numerals in paint and then on their paper headbands. Adapt and modify as noted below based on the developmental levels of children in your group. If you are working with ELL/DLL children, be sure to identify the colors and numerals in both their home languages and English.
 - Toddlers/Twos/Threes: As these children create, talk about the numerals they choose to use as well as the colors. Now is a meaningful time to expose them to these concepts.
 - Fours/Advanced Preschoolers: These children should be able to identify some of the numerals they choose to put on their crowns. They should also be able to identify the colors they choose to use. Now would be an excellent time to record this information in each child's developmental record. As these children create, encourage them to share if they have a favorite numeral. If so, what is it and why do they like that numeral? Once the children's crowns are dry, be sure to have them write their names as well, if they are able to do so.

DAY 10 - Center/Small Group Activities

Questions to Spur Thinking

- *Tell me about your Numeral Crown.*

- *What do you like most about this story?*
- *If we had a bigger Counting Tree, how many birds do you think it would hold?*

A Story to Share

(Toddlers–4 years, ♥ 😊 🔍 ✋ 🎨 ① ? 💬)

Materials:

- ☐ The Counting Tree Story Props & numeral cards
- Because more advanced children are now familiar with the story of, "The Counting Tree," they can attempt to props to retell the story in their own words. This experience invites your more advanced children to assume a leadership role as they lead an experience. In the process, everyone will build key receptive and expressive language skills.
 - Invite interested children to use the story props for, The Counting Tree to retell the story in their own words. As you participate with the children, be sure to ask questions and engage them in conversations. This is an excellent way for you to help the children build both language and vocabulary skills.
 - Advanced Preschoolers: Invite these children to use the props to create new stories.

Notes and Words

(Infants, 💬 🎵 🔍 😊 ♥)

Materials:

- ☐ None needed
- Rhymes and songs are excellent tools for helping infants build language and vocabulary skills. Reciting rhymes and singing songs repeatedly helps build exposure to language in a fun way. Try to incorporate the songs and rhymes from this unit into your daily routines such as diapering or riding in a baby swing.
 - Hold the infant in your lap and sing some of the song or recite some of the rhymes from this unit as well as additional ones in the back of this Teaching Guide.

Your Own Activities

School-Age Activities

If you have school-age children in your care, use these experiences with them as desired. Most require little preparation and can be implemented with just a few children. In addition, all of them can be extended to last more than one day.

Counting by Tens



Materials:

☐ None needed

- Counting by tens is a mathematical skill older children can certainly learn. Using a chant with actions to help children gain this skill is a wonderful way to help this new knowledge “stick” while building gross motor coordination at the same time.
- Teach interested children the following chant and invite them to do the motions as they say the words with you.

COUNT BY 10'S

10, 20, 30, clap, clap, clap.
40, 50, 60, tap, tap, tap.
70, 80, 90, hop, hop, hop.
When we say, “100!” we will stop.

- EXTEND FOR ANOTHER DAY:** On another day, have the children change the actions that go with the rhyme. This will also require them to think about rhyming words...adding a touch of literacy to the experience. For instance, they may say, “10, 20, 30, jump, jump, jump. 40, 50, 60, bump, bump, bump”... and so on. See how many different ways they can say, and act out, the rhyme.

Counting by Tens

Questions to Spur Thinking

- Why do you think learning to count by 10's is important?
- When might you count by tens?
- What other numbers could you count by?
- What new numeral did we make by putting two numerals together?
- What happens when we flip the order of the numerals?
- What is the largest numeral we can make with the cards?
- Where have you seen large numerals, like these, before?
- What do you think is the biggest numeral we can make?

Exploring Larger Numerals

Big, Big, Numerals



Materials:

☐ **Numeral cards (0-9)** - To make, print each numeral on a separate index card.

- School-age children are already very familiar with the numerals 0-10 but now their challenge is identifying larger numerals. This action-packed game is a fun way for you to expose children to large numerals while promoting cooperation, problem-solving and language development.
- Show the children the numeral cards. Invite them to name all of the numerals on the cards. This should be VERY easy for them! Then, turn the cards face down on the floor or table. Have the children turn over two cards. Invite the children to put the cards side-by-side. What new numeral did they create? See if the children can read the numeral on their own or if you need to help them. Then, flip the order of the cards and challenge the children to read the new numeral. How is this new numeral like the previous one? How is it different? Repeat...using 3, 4, 5 or even more numeral cards. This will expose the children to larger and larger numerals.
- EXTEND FOR ANOTHER DAY:** Play the game again and invite the children to see if they can figure out how to make the largest numeral possible with the 0-9 cards.

School–Age Activities

Call Me!



Learning about Phone Numbers

Materials:

- ☐ **Folded and stapled booklet for each child** - To make, simply place white paper inside construction paper, fold and staple. Make one booklet for each child.
- ☐ Old telephone or cellphone (with manual buttons and not a touchscreen)
- ☐ Crayons, markers, pencils, colored pencils
- School-age children should know their phone numbers. The purpose of this experience is to invite children to practice writing their own phone numbers while creating a book they can use to contact their friends. This is a great way for them to build social bonds.
- To begin, have interested children take turns using old telephones or cellphones to pretend to call home. As they do this, encourage them to share why they believe it is important for them to know their phone numbers. Additionally, they can practice calling their parent/caregiver's cellphone numbers as well. These are equally important! Then, provide each child with a booklet. The children can print the title, "My Phone Book" on the cover along with their names. Then, they can have their friends write their names and phone numbers inside their books. Once the books are completely, they can use them to call (or text) their friends...with their parent's/caregiver's permission...of course!

EXTEND FOR ANOTHER DAY: Have the children add phone numbers for stores & restaurants the enjoy visiting in their own community. They may need to use the internet to look up these number.

Questions to Spur Thinking

- *What is your phone number?*
 - *Why is it important to know your phone number?*
 - *When might you need to phone home or call your parent's/caregiver's cellphone?*
 - *What would happen if you entered the numbers in the wrong order?*
-
- *What numerals do you recognize?*
 - *Which numeral is the smallest? Which numeral is the largest?*
 - *What did you do to help you figure out which numeral comes next?*
 - *What other numerals could we add to this game?*

Numerals Go in a Specific Order

Orderly Numerals



Materials:

- ☐ **Eight to ten numeral cards** - To make, print larger numerals on index cards such as 16, 26, 34, 45, etc.
- ☐ Stopwatch or smartphone with a stopwatch feature
- School-age children should have a fairly well-developed knowledge of numerals. This experience takes what they know and expands upon it by asking them to put large numerals in order from the smallest to the largest. Doing this as part of a group game makes it exciting and fun!
- Show interested children the numeral cards you prepared ahead of time. Turn the cards face down on the table or floor and then have the children turn them over, one at a time. See if the children can identify all of the numerals as they are turned over. Then, see if the children can arrange the numeral cards in order from the smallest to the largest. When finished, introduce the game. Have the children close their eyes while you mix up the order of the numeral cards. Then, have the children open their eyes and work together to rearrange the cards so that the numerals are once again in order from the smallest to the largest. Use a stopwatch or the stopwatch feature on a smartphone to see how long it takes the children to complete this task. Then, repeat the process and see if the children can "beat" their previous time.

EXTEND FOR ANOTHER DAY: Play the game over several days. This should decrease the amount of time it takes the children to arrange the cards. Then, switch up the game by having the children arrange the cards from the largest to the smallest numeral. This may be more challenging for them!

School–Age Activities

Get Moving!

Find the Sum



Addition and Subtraction

Materials:

- ☐ **Numbered paper** - To prepare, print the numerals 0-10 on pieces of construction paper and tape to the floor.
- Most school-age children are working on learning their addition and subtraction facts. This game encourages the children to practice these concepts through the course of an exciting, action game. During the course of this game, the children will need to practice cooperation as well as self-regulation.
- To begin, point out the numbered papers and invite those children who seem interested to name each numeral as you point to it. This should be VERY easy for them!
- Next, introduce the game, "Find the Sum." Explain that the object of the game is for them to find and touch the numbered paper that shows the sum of the addition or subtraction fact you say. For instance, if you say, "2 + 3," the children would run and touch the sheet of paper with the numeral 5. Repeat, giving the children a different addition or subtraction fact each time.

EXTEND FOR ANOTHER DAY: The next day, let the children take turns saying the addition or subtraction facts. This is a great way for them to assume a leadership role!

Questions to Spur Thinking

- *What numerals do you see on the paper?*
 - *Which is easier for you to solve...addition or subtraction facts? Why do you think that is?*
 - *How could we make this game easier? Harder?*
-
- *What do you think it means to divide?*
 - *How many blocks do you think you will have once all of the blocks have been divided?*
 - *How close was your prediction to the actual result?*
 - *What other things could we divide?*

What is Division?

Divide It Up!



Materials:

- ☐ Container of blocks (e.g., Legos®)
- The concept of division may seem challenging for young children but when introduced in a real life situation (e.g., sharing a toy like blocks), it is easy for them to understand. This is especially true because most children want things to be divided in a way that is fair! The purpose of this experience is to expose children to the concept of what it means to divide in a way that makes sense to them and is applicable to their lives.
- Set out the blocks. As children show interest, explain that you would like to divide the blocks evenly so that everyone has the same amount. Before the children get started, invite them to predict how many blocks each of them will have once they are divided. If desired, write these predictions on paper.
- Next, have the children work together to figure out how they are going to divide the blocks evenly and then provide them with time to try their ideas. Keep in mind that their first idea may not work...and this is fine! Trial and error is an important part of the learning process. After the children figure out how to divide the blocks, have each child count to see how many blocks he/she has. Then, compare the actual results to their earlier predictions.

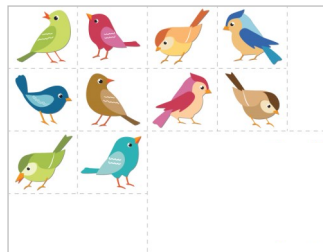
EXTEND FOR ANOTHER DAY: Have the children divide up something else such as a snack or art tools.

“The Counting Tree” Story Props

Directions for Preparation & Use

Preparation:

- First, print the sheets from the story prop file.
- Tape the two sheets that contain the tree together where indicated. Cover these with clear Contact® paper. Next, cover the sheet containing the birds with Clear® contact paper as well and cut apart. You will need a tape loop on the back of these when telling the story.
- The numeral cards can be mounted to heavy paper and cut apart OR you can cut and then mount to index cards.



*****The Teaching Guide will provide details on when, and how, to use this material.*****

THE COUNTING TREE

Come with...come with...come with me,
Come with me to The Counting Tree!
I wonder...wonder...what we'll see,
When we get to The Counting Tree.

Watch and...watch and...watch with me,
Something's coming to The Counting Tree!
Count it...count it...count with me;
One pretty bird is on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now two pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now three pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now four pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now five pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now six pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now seven pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now eight pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now nine pretty birds are on The Counting Tree.

Watch and...watch and...watch with me,
More are coming to The Counting Tree!
Count them...count them...count with me;
Now ten pretty birds are on The Counting Tree.

Ten pretty...ten pretty...birds to see,
Ten pretty birds on The Counting Tree.
But wait...but wait...but wait and see,
All ten birds left The Counting Tree.

How many...how many...birds to see,
Are now left on The Counting Tree?
Zero...zero...birds to see,
Zero birds on The Counting Tree.

Extension Ideas

Use these extension ideas in addition to the activities included in the Teaching Guide to further expand upon this unit with the children.

How Many Birds? - Have the children close your eyes while you make a set of birds on The Counting Tree. When the children open their eyes, have them count the number of birds in the tree.

2 + 2 = ? - Use the story props to expose children who are developmentally ready to the concept of addition. Have the children put a few birds on the tree. Count the number of birds and write this numeral on a sheet of paper with the + sign. Then, have the children add more birds. Count the number of birds the children add and add this numeral to the addition fact (e.g., $2 + 2 = \underline{\quad}$). Finally, have the children count the total number of birds on the tree and write that numeral at the end to complete the addition fact.

Directions for Make It! Sheets & Let's Read Together! Booklets

The Make It! sheets enhance the experiences presented in the lesson plans. Feel free to incorporate these activities where you feel they would fit best. Each one can be completed in different ways for children of different ages. The details below explain how each sheet COULD be used. Feel free to use them in other ways as well.

Make It! Sheet #1 – Numbers & Me!

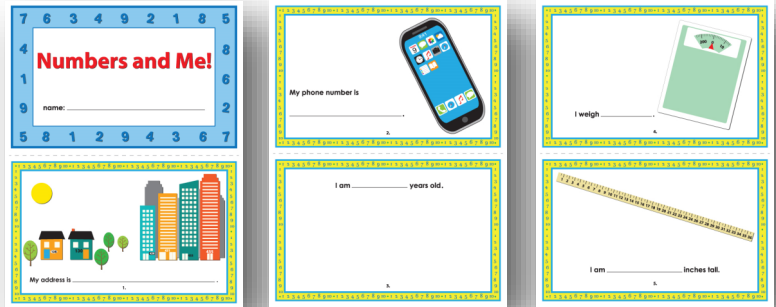
Available in English & Spanish

You Will Need:

- Copies of all the sheets for each child
- Crayons/markers/pencils
- Child-safe scissors
- Bathroom scale
- Yardstick

What to Do:

- The purpose of these sheets is to help children learn more about how numerals relate to them as well as build language skills, numeral recognition and literacy. When the booklet is complete, each child can “read” it with his/her parents/caregivers.
- Print out copies of all of the sheets for each child. Work with each child to help him/her complete each page by adding the corresponding information. On the page where the child adds his/her age, he/she can draw a self-portrait or you can take a photo to print out and glue on. Once the pages are filled out, the child can cut them apart and you can staple on the left-hand side before sending home.



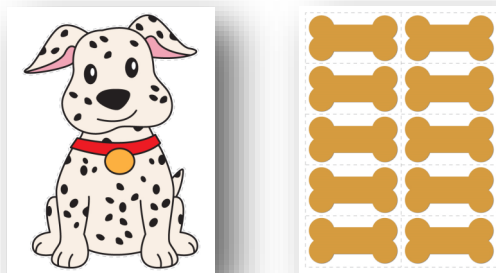
Make It! Sheet #2 – Feed the Dog

You Will Need:

- Copies of both sheets for each child
- Child-safe scissors
- Crayons/markers
- **Paper lunch bag for each child**
- Gluesticks or tape

What to Do:

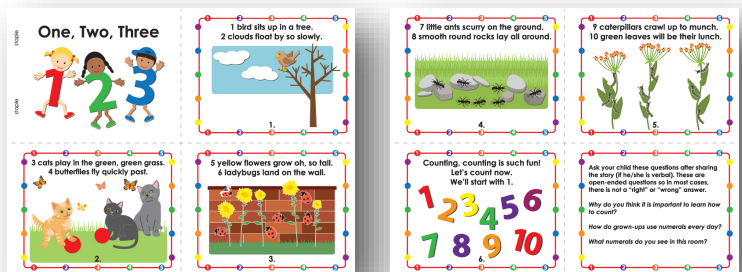
- The purpose of these sheets is to help each child create a game he/she can use to practice counting skills both in your program and at home.
- To begin, give each child a copy of both sheets. Cut the dog from the sheet and attach it to the front of a paper lunch bag using a gluestick or tape. Keep the opening of the bag at the top. Put the dogs aside. Next, have the children cut the bones apart by following the dotted lines. The children can then pretend to “feed” their dogs by putting bones in and out of the bag. Children who are ready can count the number of bones they feed their dog while doing so.
- **HELPFUL TIP:** Have each child use a different color marker to make a dot on the back of the bones. That way, if the pieces get mixed up, they will be easy to sort out.



Let's Read Together! Booklets

Available in English & Spanish

Print out a copy of the booklet (front-to-back or 2 pages) for each child. Cut apart, stack in order and staple on the left-hand side. Use the booklets in your program as desired and then send home to help families enhance literacy skills.



Experiences for Advanced Preschoolers: School Readiness

The following experiences are designed for advanced preschoolers that are ready to learn more about letters and sounds as well as numbers, mathematical operations (addition/subtraction), and spatial concepts. The following extension ideas blend well with the activities presented in this Teaching Guide. Incorporate them as you complete activities if they are appropriate for the advanced children in your care.

Letter Recognition, Beginning Sounds and Creative Writing:

- ☐ **Number Words Book:** This experience will challenge the children to combine writing with numerals to create a book they can “read” to younger children. For this experience, you will need white paper, a stapler, crayons/markers and samples of counting/number books. To begin, have the children explore the counting/number books. Talk about how these types of books are set up. Look for both numerals and number words (e.g., 2 and two). Then, have the children stack white paper and staple on the left-hand side. They can then use art tools such as crayons/markers to create their own number/counting books. Each page of their books should highlight a different numeral. It should contain the numeral, the number word and the matching number of items. See example. Once the children’s books are finished, they can share them with you, younger children and of course, their parents/caregivers.



- ☐ **It Starts With...:** As you introduce each new vocabulary word, print it on paper and have children identify the beginning letter and sound. Can children list other words that begin with the same letter and sound?
- ☐ **Stories about Three:** There are many stories that feature the numeral three... “Goldilocks and the Three Bears,” “The Three Little Pigs,” “The Three Billy Goats Gruff” and so on. Share one, or more, of these common fairy tales and then challenge the children to write their own tale that includes the numeral 3. The children can brainstorm ideas first, then create a rough draft, revise and then create the final version. The final version might be in booklet form with illustrations or it may even be some type of story props. The choice is theirs. Once the children finish their stories, they can share them with younger children and their families at home.

Counting and Number Recognition:

- ☐ **Numeral Chain:** This is a fun activity to do that can truly keep going and going and going. All you will need is construction paper, crayons/markers and tape or a stapler. To begin, have the children cut the construction paper into strips like you would use to create a paper chain. Then, have the children write numerals on the strips. They will begin with the numeral 0 and end with the numeral 100. Once the strips are ready, the children will work together to put them in the right order. They will loop each strip and then tape or staple it as they add it to the chain. Once the numeral chain is finished, display it for all to see. This will be an excellent talking point for exposing your younger children to larger numerals and helping them see just how much 100 is!

Learning Indicators Addressed By Activity

	Exploring Together	Small Group	Small Group	Infant
DAY 1	The Counting Tree LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, LK1, MK1, MK2, PD5	Creating Art & Counting LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LR1, LR2, MK1, MK2, CA3, PD5	"I Like Counting" - An Action Song LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, MK1, MK2, CA1, PD1, PD4	Counting Book Fun LD1, LD2, SE1, SE4, AL1, SK1, MK1, MK2, LK1, PD5
DAY 2	Bounce & Count LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LK1, LR1, LR2, MK1, MK2, PD4	Read & Count LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LK1, LR1, MK1, MK2, PD5, SS1	Count & Freeze Game LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, MK1, MK2, PD1, PD4	1, 2, 3, 4, 5 LD1, LD2, SE1, SE4, AL1, SK1, MK1, MK2, CA1, PD5
DAY 3	Super Sets LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, SK3, LK1, LR1, MK1, MK2, PD5	Name, Move, Count LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, MK1, MK2, PD1, PD4	Creating with Sets LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, SK2, LK2, LK3, LK4, LK5, LR1, LR2, MK1, MK2, CA3, PD5	Sponge Set Fun LD1, LD2, SE1, SE4, AL1, SK1, SK3, MK1, MK2, PD5
DAY 4	Numerals Are... LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, SK3, LK1, MK1, MK2, MK6, LR1, PD5	Press 'N See LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, SK2, LR1, LR2, MK1, MK2, PD5	Follow the Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, LR2, MK1, MK2, CA1, PD4	Sing It Again LD1, LD2, SE1, SE4, AL1, SK1, MK1, MK2, CA1, PD5
DAY 5	Finding Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, LK1, LR1, LR2, MK1, MK2, SS1, PD5	My Own Numeral Detector LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, SK2, LK2, LK3, LK4, LK5, LR1, LR2, MK1, MK2, PD5	Numeral Exploration Station LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, LR1, LR2, MK1, MK2, MK6, PD5	Sensory Numerals LD1, LD2, SE1, SE4, AL1, SK1, SK3, MK1, CA3, PD5
DAY 6	Numeral Walk LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, SK3, LK2, LK3, LK4, LK5, MK1, MK2, LR1, CA1, SS1, SS2, PD3, PD5	License Plate Fun LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, SK2, MK1, MK2, LR1, LR2, CA3, CA4, SS1, PD3, PD4, PD5	Digging for Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, SK2, SK3, LR1, MK1, MK2, SS1, PD5	Numeral Fun LD1, LD2, SE1, SE4, AL1, SK1, MK1, PD5
DAY 7	Me...by the Numbers LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, SK3, LR1, MK1, MK2, MK5, CA1, SS1, PD5	Dialing Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LR1, LR2, MK1, MK2, SS1, PD2, PD3, PD5	How Fast Can You...? LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, SK3, LR1, MK1, MK2, MK5, PD1, PD4	10 Fingers & 10 Toes LD1, LD2, SE1, SE4, AL1, SK1, SK3, MK1, MK2, CA1, PD5
DAY 8	Cool Calculations LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, LR1, MK1, MK2, CA1, SS1, SS2, PD5	Calculator Twist Up LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, LR2, MK1, MK2, LR1, LR2, PD4	Check Out! LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, LK2, LK3, LK4, LK5, LR1, LR2, MK1, MK2, CA4, SS1, SS2, PD5	Noisy Numeral Art LD1, LD2, SE1, SE4, AL1, SK1, SK3, MK1, CA3, PD5
DAY 9	How Many? LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, MK1, MK2, LR1, LR2, PD5	Park the Cars LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LR1, LR2, MK1, MK2, MK6, PD5, SS1	What Can You Build with...? LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, SK2, MK1, MK2, LR1, LR2, PD5	Eat 'N Count LD1, LD2, SE1, SE4, AL1, SK1, MK1, MK2, PD5
DAY 10	Fun with Numerals Day! LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, SK2, LK1, MK1, MK2, MK6, LR1, LR2, PD4, PD5	My Numeral Crown LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LK2, LK3, LK4, LK5, MK1, MK2, LR1, LR2, PD5	A Story to Share LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LK1, MK1, MK2, LR1, PD5	Notes & Words LD1, LD2, SE1, SE4, AL1, CA1, SK1, MK1, MK2, PD5

School-Age Experiences		
Counting by Tens LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, LR1, MK1, MK2, PD5	Call Me! LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, SK1, LK2, LK3, LK4, LK5, MK1, MK2, LR1, SS2, PD5	Find the Sum LD1, LD2, LD3, LD4, SE1, SE2, SE3, SE4, AL1, AL2, AL3, SK1, LR1, MK1, MK2, PD4
Big, Big Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, SK2, LR1, LR2, MK1, MK2, PD5	Orderly Numerals LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, MK1, MK2, LR1, LR2, PD5	Divide It Up! LD1, LD2, LD3, LD4, SE1, SE2, SE4, AL1, AL2, AL3, SK1, SK2, LR1, LR2, MK1, MK2, PD5

Book List

Here is a list of books that compliment our unit, "Numbers Help Me Count"

Baby's Numbers by Karen Katz

Colors, Numbers, Letters by Leo Lionni

Counting by 7s by Holly Goldberg Sloan

Counting Kisses by Karen Katz

David Carter's 100 by David Carter

Hippos Go Berserk! by Sandra Boynton

I Spy Little Numbers by Jean Marzollo

I Spy Numbers by Jean Marzollo

Knots on a Counting Rope by Bill Martin, Jr. and John Archambault

Me and the Measure of Things by Joan Sweeney

Millions, Billions & Trillions by David A. Adler

Millions to Measure by David M. Schwartz

Missing Math: A Number Mystery by Loreen Leedy

The Mission of Addition by Brian P. Cleary

My First Numbers by DK Publishing

My Numbers/Mis Numeros by Rebecca Emberley

My Very First Book of Numbers by Eric Carle

Numbers by Sara Anderson

Numbers/Numeros by Roger Priddy

Pocket Piggies Numbers! by Richard Austin

Really Big Numbers by Richard Evan Schwartz

Richard Scarry's Best Counting Book Ever by Richard Scarry

Ten Apples Up on Top;/Diez manzanas en la cabeza! By Dr. Seuss

You Can Count on Monsters by Richard Evan Schwartz

THE NUMERAL PATH

(tune: "Here We Go 'Round the Mulberry Bush")

Let's walk along the numeral path,
The numeral path, the numeral path.
Let's walk along the numeral path,
And then we all will STOP!
(children walk & then stop)

Let's hop along the numeral path,
The numeral path, the numeral path.
Let's hop along the numeral path,
And then we all will STOP!
(children hop & then stop)

Let's dance along the numeral path,
The numeral path, the numeral path.
Let's dance along the numeral path,
And then we all will STOP!
(children dance & then stop)

Incorporate as many different movements as you would like as you sing the song. In addition, feel free to name the numerals the children are standing/ sitting on when you finish each verse or have more advanced children model this skill for the group.



FIVE LITTLE FINGERS
(tune: "The Wheels on the Bus")

Five little fingers on each hand,
On each hand, on each hand.
Five little fingers on each hand,
1, 2, 3, 4, 5!



WE FOUND NUMERALS
(tune: "Here We Go 'Round the Mulberry Bush")

We found numerals, yes, we did!
Yes, we did! Yes, we did!
We found numerals, yes, we did!
We found them on a (name of item).

CALCULATORS & CASH REGISTERS
(tune: "Twinkle, Twinkle, Little Star")

Calculators are a tool
People use at home and school.
They can help us add...it's true,
So we know what's 2+2.
Calculators are a tool
People use at home and school.

Cash registers are helpful, too.
They add up our bill...it's true.
When we buy our food each day,
They tell us how much we should pay.
Cash registers are helpful, too.
They add up our bill...it's true.

(CHILD'S NAME) IS _____ YEARS OLD
(tune: "The Farmer in the Dell")

(Child's name) is (#) years old,
(Child's name) is (#) years old,
Let's clap our hands that many times,
(Child's name) is (#) years old.

(Clap your hands to match the age of each child)

I LIKE COUNTING

(tune: "Here We Go 'Round the Mulberry Bush")

I like counting, yes, I do,
Yes, I do. Yes, I do!
I like counting, yes, I do,
How about you?

Let's all do 1 jumping jack,
Jumping jack, jumping jack.
Let's all do 1 jumping jack,
Ready? Set? Go!

(Count as you do 1 jumping jack)

Let's all stomp our feet 2 times,
Feet 2 times, feet 2 times.
Let's all stomp our feet 2 times,
Ready? Set? Go!

(Count as you stomp your feet twice)

Continue adding verses using different actions (or repeating the same ones). Suggested actions include clapping hands, wiggling noses, nodding heads, etc.) Invite your more verbal children to suggest movements.

