

Musical Moments

using music

to explore math

in children's literature

presented by

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INSTITUTE FOR
EARLY LEARNING
THROUGH THE ARTS

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Goal and Objectives

Workshop Description

In this highly interactive workshop, participants will learn how to tap into young children's love of music and stories to spark meaningful explorations of math. Participants will examine children's literature to uncover math and music connections. They will experience how to maximize the magical process of play by identifying math opportunities in any book, story, or lesson and then creating catchy songs, chants, or refrains to teach these math concepts. Participants will also explore the use of music as a classroom management and assessment tool.

Goal

- To teach teachers simple strategies for creating songs and math experiences from any early childhood lesson or story.

Objectives

Participants will:

- Explore musical tools that can be used to actively engage pre-K children in storytelling experiences.
- Practice identifying opportunities to connect math and music with children's books.
- Learn how to empower children to actively apply critical-thinking skills to create song lyrics.

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Introduction

According to Harvard psychologist Howard Gardner (1983), music intelligence is equal in importance to logical-mathematical intelligence, linguistic intelligence, bodily-kinesthetic intelligence, interpersonal intelligence, and intrapersonal intelligence. In a math and logic study at UC Irvine, researchers found that children exposed to music “dramatically improved in spatial reasoning” as shown in their ability to work mazes, draw geometric figures, and copy patterns of two-color blocks. “Music,” said the UC team, “excites the inherent brain patterns and enhances their use in complex reasoning tasks.”

Research on music and music therapy suggests that math and music are related in the brain from very early in life (Burack 2005). Musical elements such as steady beat, rhythm, melody, and tempo possess inherent mathematical principles such as spatial properties, sequencing, counting, patterning, and one-to-one correspondence. Zentner and Eerola (2010) found that 120 infants, ages 5–24 months, were more engaged with rhythm-only stimuli (for example, a steady drum beat) than with speech-only stimuli. Recent music neuroscience research suggests that steady beat does affect attention behaviors in humans. These studies indicate that children have the potential to be more engaged when listening to steady beats than when listening to verbal-only instructions. Therefore, it is conceivable that listening to a steady beat pattern during mathematics lessons and activities promotes better attention and increased engagement in young children.

In her book *The Young Child and Mathematics*, Juanita V. Copley suggests that because children are natural learners, “more” is a word two-year-olds know readily. Creating jingles, songs, and chants from math excavated from stories and lessons can help draw upon the young child’s intuitive understanding of informal mathematics, such as adding and subtracting, as a way to describe and explain situations that occur in their world.

Friends Going to the Zoo

Skills Focus: transition exercise, movement, counting, addition, imagination, patience, self-regulation,
Vocabulary: count, add, prove, imagination, next
Melody: Old Cracker Barrel

Procedure

Today we're going to visit the zoo. I will sing a song when it is time for a new friend to join the line.

"We ___ (choose the number of children you would like to start with) friends are going to the zoo, going to the zoo, going to the zoo. We ___ friends are going to the zoo, but we want to take _____ (insert child's name) too."

Ask the children to help you count the total number of children in the line. Repeat.

Once you have all the children in the line, parade around the room singing the total number of children. Count the children again to prove that you are singing the correct number.

"We ___ friends are going to the zoo, going to the zoo, going to the zoo. We ___ friends are going to the zoo. That's what we're going to do."

Exercise:

Use math to transition children from one activity to another. Each time you add a child, be sure to have the children count the total number.

Create a chant: What areas do you need to transition your children to? What other setting can replace zoo in your chant?

Application:

We (# of friends) friends are going to the store, but we're going to add one more.

My (# of friends) friends are standing in the line, let's add one more behind.

Closing:

We _____ friends will line up at the door..._____

Write your own:

What are some other ways we can use a math chant/song to mobilize children?

Suggested Books

This experience can be used for any transition or travel activity. Possible books include:

- *Barnaby Goes to School* by Wendy Rouillard
- *Five Little Monkeys Jumping on the Bed* by Eileen Christelow
- *The View at the Zoo* by Kathleen Long Bostrom

Sammy the Snake Takes Shape

Skills Focus: shapes, imagination, turn-taking

Vocabulary: imagination, create, microphone, sling, bandana, scarf, cape, triangle, square, circle, rectangle, shape, size

Materials: Scarves

Procedure

Introduce pillowcase with shy friend Sammy. Pull one scarf out slowly. *My friend Sammy loves to pretend. What is this in my hand? That's right. It's a scarf. But when I use my imagination, I can turn Sammy into a snake that talks to me. Sammy, what you like to pretend to be?* Demonstrate some of the things Sammy pretends to be. Let the children guess the vocabulary words for: microphone, bat, cape, sling, scarf, etc. Let Sammy whisper to you. *Sammy brought a few friends along. Would it be OK if they came out too? Would you like to play with Sammy's friends?*

Give each child a scarf. *Who can turn their scarf into a microphone, (sling, bandana, etc.)? Wait! Sammy is telling me something. What's that, Sammy? You and your friends would like to turn into a shape? What shape would you like to turn into? Sammy says she and her friends would like to become squares. Can we create squares, boys and girls? How many sides will our scarf need to become a square? Boys and girls, can you turn your scarves into squares?* Let Sammy whisper another shape to you. Ask the children to turn their scarves into another shape. Let the children suggest shapes by having their scarf whisper a shape in their ear. *How many sides will our scarf need to become a _____?*

Ask all the children to make that shape on the floor. *Let me see the biggest/smallest (shape name) you can create.* Choose a few children to suggest shapes (triangle, rectangle, circle, etc.) by following the pattern above.

Application:

Allow children to find shapes in their classroom/environment. How can children make shapes with their bodies? Use music and the freeze dance game to have children freeze into a certain shape.

Use your body to make (big/small) shapes with a partner. Freeze when the music stops. You and a partner stand close and model your shape after a shape in the room.

Closing: Call and Response song (To the tune of "Mama's Little Baby Loves Shortening")

Call: Can you make a (name of shape), a (name of shape), a (name of shape)? Can you make a _____, let me see!

Response: I can make a (name of shape), a (name of shape), a (name of shape). I can make a _____, look at me!

Write your own:

Using the tune from "Mary Had a Little Lamb," write a chant/song about shapes.

Suggested Books

Shapes can be found in any books with pictures. Point out that windows are shaped like squares, doors and pillows are rectangles, balls are circles, rooftops are triangles, etc. Select books that feature neighborhoods and scenery common for children. Examples include:

- *Mama Provi and the Pot of Rice* by Sylvia Rosa-Casanova
- *Barnaby Goes to School* by Wendy Rouillard
- *Goodnight, Moon* by Margaret Wise Brown
- *The Power of Henry's Imagination* by Skye Byrne

Shape Song

Skills Focus: Shapes, imagination, turn-taking, recall, spatial relations

Vocabulary: imagination, create, triangle, square, circle, rectangle, shape, size

Materials: scarves, puppet

Melody: "Bumble Bee"

Procedure

Boys and girls, the scarves are back and they brought along a friend named Mother Goose. (Pull puppet from bag.) Mother Goose heard about how our friends, the scarves, can turn into shapes, and she doesn't believe it. Can we show her, boys and girls? Mother Goose would like us to create shapes when she sings her special shape song. Can anyone remember some of the shapes we created from the scarves when they visited us before? How many sides did that shape have? Let's spread out a little while I pass out the scarves. Does everyone have room to create a shape on the floor in front of them? OK, listen for the name of the shape in the song.

My friends are gonna make a shape for me. Let me see what shape I want to see.

My friends are gonna make a shape for me. A _____ is the shape I want to see.

Use a puppet/doll to direct the children. Decide what you want the children to "walk away knowing."

Give your puppet a name, voice, personality, and a magic wand. Introduce your puppet in his/her voice.

Application:

Tell the children the puppet has an imagination wand that will turn them into shapes.

Talk through the puppet in the rhythm of "Roses are red."

Roses are red. Violets are blue

....

...

Write your own:

Using a tune from any nursery rhyme or popular tune on our list, write a chant/song to instruct the children to turn into a shape.

Suggested Books

Symbols are a great introduction to reading letters, numbers, and music. Character or object names from any story can be replaced with a sound effect and then represented by a symbol. Examples include:

- *Hey, What's That Sound?* by Veronika Martenova Charles
- *Peace at Last* by Jill Murphy
- *Mmm, Cookies!* by Robert Munsch
- *Skit-Scat Raggedy Cat* by Roxanne Orgill

Popular Nursery Rhymes

A Tisket, A Tasket
Did You Ever See a Lassie
Farmer in the Dell
Frere Jacques
Here We Go 'Round the Mulberry Bush
Hey, Diddle Diddle
Hickory Dickory Dock
Hot Cross Buns
Humpty Dumpty
I'm a Little Teapot
It's Raining, It's Pouring
Itsy Bitsy Spider
Mary Had a Little Lamb
Muffin Man
Old McDonald
On Top of Old Smoky
Rain, Rain, Go Away
Row Your Boat
Sing a Song of Sixpence
Take Me Out to the Ballgame
This Little Piggy
Three Blind Mice
Twinkle, Twinkle, Little Star
Wheels on the Bus
Where, Oh Where Has My Little Dog Gone
Working on the Railroad
You Are My Sunshine

The Clap Rap

Skills Focus: syllables, one-to-one correspondence, counting, addition, imagination, proving, mental math
Vocabulary: syllables, prove, snap, clap, stomp, prediction, more, less, compare

Procedure

My friend Sammy is back. Hi, Sammy! What are you up to today? (Sammy whispers in ear.) The Clap Rap? What's that, Sammy? Sammy says the Clap Rap is when you speak and clap the parts of a name. Can we try it? Hands up! Sam-my. (Repeat.) That was fun! Can we another name?

What's that, Sammy—you have another name? What is your other name? Samantha? Sa-man-tha. I thought your name was Sammy? Oh, Sammy is your nickname! Why do you think Samantha's parents call her Sammy? Do you think the name Sammy is looonger or shorter than the name Samantha? Oh, so your parents were looking for a short name to call you? Boys and girls, can we clap Sam-my? This way we can compare and see which name is shorter and which name is longer. (Clap.)

We will clap one time for each syllable in the name "Sam-my." Sam-my. Sam-my. Who would like to make a prediction—a guess—about how many times we will clap for the name "Sam-my"? Teacher, may we use your fingers? Would you hold up one finger for each syllable we clap? Boys and girls, can we clap Sam-my? (Lead the clap. Say the name explicitly and rhythmically.)

How many times did we clap? Let's prove it. How many fingers is Teacher holding up? There are two syllables: Sam-my.

Now let's see how many syllables are in the name "Sa-man-tha." Who would like to make a prediction? Do you predict that Samantha will be longer or shorter? Who would like to predict the number of claps or syllables in the name Sa-man-tha? Let's see if my friend is right. Teacher, may we use your fingers? Would you please put up one finger each time we clap? Boys and girls, can we try it again to make sure or prove that there are three claps or syllables in Sa-man-tha? Can we clap it?

How many times did we clap for Sa-man-tha? Let's prove it. How many fingers is Teacher holding up? (Ask the children to help you count the total number of fingers the teacher is holding up.)

Let's see how many snaps are in Sa-man-tha. Would someone like to make a prediction or a guess about how many snaps are in Sa-man-tha. Teacher, can we use your fingers again? Let's snap Sa-man-tha! Fingers up! Here we go! Sa-man-tha! How many times did we snap? Let's prove it. How many fingers is Teacher holding up? How many snaps are in Sa-man-tha?

Can we stomp it? Let's see how many stomps are in Sa-man-tha. Would someone like to make a prediction or a guess about how many stomps are in Sa-man-tha? Teacher, may we use your fingers? But this time, would you please hide your fingers behind your back? Ready, boys and girls? Can we try it again to make sure or prove that there are three stomps or three syllables in Sa-man-tha? (After we stomp.) How many syllables was that, boys and girls? Let's see if we are right. Teacher, would you show us how many fingers you had up behind your back? (Ask the children to help you count the number of fingers the teacher is holding up.)

The Clap Rap Around

Skills Focus: syllables, one-to-one correspondence, number sense, counting, proving, mental math, number recognition, chart, non-standard measurement

Vocabulary: syllables, prove, clap, prediction, predict, chart, most, least, column

Materials: Chart

Procedure

Make a chart of columns on the board with the numbers 1, 2, 3, 4, 5. As each name is clapped, record child's name in the appropriate column.

1	2	3	4	5

I wonder if everyone has syllables in their names. What do you think, boys and girls? Do you think we could find out how many syllables are in each of our names by clapping them? I wonder if some of have the same number of syllables.

1. Go around the room
2. Make predictions
3. Clap each name
4. Prove the number of syllables
5. Record name in appropriate column

Which column has the most names?

Which column has the least names?

Add the columns and place the total at the bottom.

Can we add music (or a steady beat) and sing our names as one (continuous) song without stopping?

Syllable Number Dance

Skills Focus: syllables, number sense, counting, mental math, turn-taking, categorization

Vocabulary: rehearsal, practice

Materials: chart

Procedure

Let's do a syllable dance. I will use my magic wand to turn you all into magic syllable dancers. I will sing the number of syllables. When I sing the number of syllables in your name, it's your turn to dance in the middle. Let's have a quick rehearsal. We will practice going to the middle when we hear the number of syllables or claps in our name.

Find your name on our syllables name chart. If you have one syllable, stand up and go to the middle. Look around. These are the people you will be dancing with when it's your turn because they each have...how many syllables in their name?

Repeat for each group.

Example (to the tune of "Momma's Little Baby Loves Shortening Bread"):

Twos are in the middle, middle, middle

Twos are in the middle

Dancing like that

And freeze!

Children with two-syllable names return to their spots, and class repeats the song with another number.

Suggested Books

These experiences help students learn to categorize, improve listening skills, promote turn taking, and teach them to respond to cues. Recommended books include:

- *Giraffes Can't Dance* by Giles Andreae
- *Caps for Sale* by Esphyr Slobodkina
- *Where the Wild Things Are* by Maurice Sendak
- *Skit-Scat Raggedy Cat* by Roxanne Orgill
- *Hey! What's That Sound?* by Veronika Martenova Charles
- *Peace at Last* by Jill Murphy

The Clap Band

Procedure

1. Choose 5 characters from any book.
2. How should the number of syllables for each name be represented on the index card?
3. Have the children record the symbol/name/number on the index card.
4. Guide the children so they tack their postcards on the board. Cards should be read from left to right.
5. Guide the children through a clap of those rhythms.
6. Add music or a steady beat to create one continuous song.
7. Choose a child to rearrange the index cards.
8. The (re)arranger should direct while the class plays the song.

What's another way we can introduce music and patterns?

1. Give children a range of numbers and encourage them to write their own composition.
2. Let them write their arrangement on the board and direct the class to play.

How can we introduce other sounds?

1. Solicit the children for symbols to represent those sounds.
2. Record those sound on the board.
3. Let everyone write their own song using a combination of sounds and symbols

What other activities can be introduced to bring out the "arranger" in every child?

Train Your Brain

Skills Focus: counting, math in your head, animal sounds, patterns, deductive reasoning, ordinal numbers, sequencing

Vocabulary: whistle, one, two

Arts Vocabulary: sound, cue, animal names, signal

Material: train whistle

Procedure

I'd like to take a trip to the farm today to visit some of my friends. Let's travel to the farm together. What do you think we will see at the farm?

Application:

Let's take the train to the farm. When I blow the whistle 1 time, the train will GO. What do you think the train will do when I blow the whistle 2 times? Confirm that when I blow the whistle 2 times, the train will STOP.

Stand up and get on the train. Children will turn while standing in circle to make a single-file line. Listen for the whistle sounds.

One train whistle means the train will _____.

Two train whistles mean the train will _____.

Create a pattern: What sound does a train make? Let's all make that sound. Can we make that sound 4 times? That is our first pattern. When the whistle blows, let's make that sound 4 times and move our train. We'll repeat that pattern over and over until the train whistle tells us to stop.

Blow the whistle 1 time. Model the sound, pattern, and movement. Blow the whistle 2 times.

Who can give our train another sound/a different sound/a second sound? Let's all make that sound. When the whistle blows, let's make that sound 4 times and move our train. We'll repeat that pattern over and over until the train whistle tells us to stop.

Blow the whistle 1 time. Model the sound, pattern, and movement. Blow the whistle 2 times.

How many patterns do we have now?

Can we put those patterns together? Listen for the signal!

Give the children a category—i.e., choose sounds, numbers, names, etc. from any lesson. Model creating a simple four-beat pattern. Allow children to create a pattern. Number the patterns—i.e., 1st, 2nd, 3rd, etc. String the patterns together.

Suggested Books

- *Inch by Inch* by Leo Lionni

The So Long Song

Skills Focus: non-standard measurement

Vocabulary: measure, long, short, compare, change, voice, sound, note, longer, stretch, hold, grow, length

Materials: Brown plastic tablecloth, slinky

Procedure

Let's dig around in the dirt and see what we find. Who can tell me what they found in the dirt? I found my friend Slinky the snake.

Slinky likes to make her body LOOOOOOONG and SHORT. Repeat and demonstrate exaggerating LOOOONG and SHORT with your voice.

Let's try it together. If we hold the note or the sound of our voices for a long time, Slinky will continue to make her body grow longer. Let's try it. Can we tell her to make her body long? Now can we tell her to make her body short? Repeat.

Who would like to help Slinky change her body to be long? Remember you have to hold the note.

What's that, Slinky? You'd like to grow until you are as long as my arm? I'll ask the boys and girls if they can hold their voices or hold a note until are the same length as my arm. Are you ready, boys and girls? When I count to 3, that will be your cue to begin. Make sure you hold that note until Slinky grows to the same length as my arm.

Application:

Guide children to identify articles in the classroom that may be longer than Slinky. *Let's help Slinky's body grow until it's the same length as something in the classroom.* Cue the children to begin. Try altering the pitch when you narrate the "loooong" sound.

Write your own:

Tell the children that Slinky wants to shorten her body. Help them create a soundtrack to shorten Slinky's body. Experiment with pitch.

Let's compare Slinky's body to the length of other objects. Does Slinky need to make her body LONGER or SHORTER to be the same length as the objects? Choose a child/group to provide the soundtrack as you lengthen or shorten Slinky

Write your own:

Using any book, select 2 words to read with expression. Experiment with pitch and hold notes. These 2 words should vary in meaning. Children should be able to sense what the word means from your expressive reading. For example:

He went waaaaay up high (high, whiney voice).

The fish swam to the BOOOTTOM of the ocean floor (low, booming voice).

Looong and Strong

Skills Focus: non-standard measurement

Vocabulary: longer, shorter, sound, cue, compare, next to, rush, tempo

Arts Vocabulary: cue, song

Procedure

Our friend Slinky likes to compete with things by making her body looonger than them. She gets really happy when I place her NEXT TO something that she is longer than. Would you like to see me place Slinky NEXT TO something that she is longer than? Place Slinky next to something so the children can compare.

Is Slinky looonger than this _____? Yes, she is, and that makes her happy because she loves it when she's longer than other things.

Repeat a few times.

Children will have an opportunity to practice non-standard measurement. *Who would like to make Slinky happy? Select a child. Can you find something that Slinky is loooooonger than?*

Repeat. The child's answer and behavior will clarify whether they have clear understanding of the concepts.

Who would like to be next? What do you have to find?

Repeat. Rephrase the question so the children can put it in his/her words. *Who else would like a turn? How can you make Slinky happy?*

Application:

Placing three items in the circle, select one child to go to the center for "beat the clock." The child in the center must hold up the item that is longer than Slinky before the other children count to three. Talk to the children about tempo and steady beat. Demonstrate a nice even pace while counting for them. Lead the children in counting to three.

Find a variation in your voice and use it to teach the children the meaning of "shorter." Repeat the above sequences replacing "longer" with "shorter."

Coffee Can Theater

Strategy developed by Michael Littman

Written by Wolf Trap Master Teaching Artist Melissa Richardson

Coffee can theater is a strategy for sharing stories in which the teller uses small props to stand in for characters and elements of setting. Children can then retell and sequence the story in a hands-on way. Coffee can theater can also be used to create original class stories.

You can use coffee can theater to:

- Establish the setting of the story.
- Introduce characters.
- Tell and sequence a full story.
- Tell stories that would otherwise be challenging for the children to understand. The added visual element can allow children to understand more complex plots.
- Reinforce math concepts. (“How many cows were there? How many pigs? How many animals in all? Which animal came first? Which animal came second?”)
- Sort characters or setting elements by attribute.
- Explore spatial and positional words related to the story. (“The lake is far from the barn. The cows are inside the barn. The duck is near the lake. The duck walked over rocks and between the trees to get to the barn.”)
- Teach story elements. (“Which of these toys is a character? Which of these toys is part of the setting?”)
- Compare and contrast a coffee can theater story with the same or similar story from a book.
- Teach flexibility. (“There’s a goose in the book, and we don’t have any goose toys. Are there any other animals we can put in our story instead?”)
- Work on imagination by using neutral or abstract props for the story. (“We will pretend that these blocks are the castle. We will pretend that this ball is a giant rock.”)
- Let children problem solve and make decisions by gathering or making props for a story.
- Adapt a well-known story using different characters or setting elements. (“The Three Little Fish and the Big Bad Shark,” “The Three Little Zebras and the Big Bad Lion.”)
- Create a simple classroom story inspired by props of a certain theme, like signs of spring, things that are soft, or the letter C.

Whether you share a story from a book, with coffee can theater, with flannel board, or with any other strategy, students should be active participants right from the start.

During a coffee can theater story, children can:

- Chant along with a line that repeats in the story. (“I’ll huff and I’ll puff and I’ll blow your house down!”)
- Chant along with a repeated line that the teacher has created for that purpose.
- Create sound effects using their bodies and voices.
- Create sound effects using instruments.
- Create gestures for characters and elements of setting in the story.

- Visualize elements of the story. (“So Squirrel ran out into a meadow and saw all sorts of flowers. Everyone imagine lots of flowers. I see tall, round, purple flowers and tiny, spiky, orange flowers. What kind of flowers do you see?”)
- Reflect on the characters’ emotions. (“Show me on your faces how Bunny is feeling with his big block tower. Now show me how Bunny feels when the tower falls down.”)
- Predict what will happen next in the story.
- Create dialogue for the characters. (“What did Baby Bear say when he saw that his favorite chair was broken?”)

Human Slide Whistle

Skills Focus: non-standard measurement, estimating

Vocabulary: up, down, bottom, top, middle, number, direction, fast, slow

Arts Vocabulary: Slide whistle

Materials: Slide whistle

Procedure

Step 1:

Using a technique like coffee can theater, present your slide whistle. Ask the children if they know what it is. Blow into the whistle, making the sound go up and down. Ask the children which way the sound went. Have the children place one hand out in front. Tell the children you want them to use their hands to follow the sound. Repeat, varying the pace. Ask the children what happened to the sound. Guide them, if necessary: *Did it go faster or slower? Did it go higher or lower?*

Select a child to pick another part of our bodies we can use to follow the sound. Blow into the whistle, making the sound go up and down. Repeat, choosing a child to identify the body part each time. End by having the children use their full bodies to follow the sound.

Step 2:

Let's pretend there are numbers in the air. The highest number is ten. I'm going to make the sound in my whistle go up until it reaches the top number, which is ten. Can you follow me with your body?

Slowly blow your whistle from the lowest to the highest sound. *Hold it there. Let's see if you know what to do next.* Slowly blow your whistle from the highest sound to the lowest sound. Ask the children what the lowest number would be.

Repeat a couple times, stopping at the halfway mark the last time. Ask the children where they stopped. *If you're not at the top, and you're not at the bottom, where are you?* Guide the children to the word "middle." *If the bottom is one and the top is ten, what number should we give the middle?* Repeat.

Slowly blow your whistle as a guide for the way the children move their bodies up and down. Stop at a different point each time. Ask the children what number they would call this stop.

Revisit tomorrow and reinforce by drawing the numbers and a dial on the board that the children can use to compare their numbers.

Ivan the Inchworm

Skills Focus: standard measurement, number recognition

Vocabulary: how many, inches, measure

Arts Vocabulary: sing, strum

Materials: ruler, bag, numbers, inches sign

Procedure

Step 1:

In a bag or box, place up to ten numbers, postcards with the symbol for inches, and a few items that are exactly 1, 2, 3 (etc.) inches, up to 10 inches. One by one, pull out each number and have the children identify the number. Pull out the symbol for inches. Introduce him as your friend, Inches. Tell the children that Inches brought another friend. Introduce Ivan. Tell the children how Ivan loves to measure (see what number of inches things are).

"Ivan the Inchworm"

There's a twelve-inch worm
That I once knew
He liked short things, long things,
Medium too

And this twelve-inch worm
Had a ruler on his tum
And he measured things
With a strum, strum, strum

Step 2:

Let Ivan whisper to you that he brought some things to measure. Using role play or a simple request for help, as you measure, ask the children to help you read the numbers.

"Measurement Song"

Place Ivan on his head
With his bottom at the top
Place the object on his tummy
Tell us where it stops

Step 3:

Demonstrate the sequence. Pull an item from the bag. Have the children identify the item. Place the item on the ruler. Ask the children what number the item stops at. Pull that number from the number manipulatives. Place the sequence after it (on the floor/board). Read the sequence aloud, encouraging the children to join in. Repeat.

Step 4:

Start a sentence for the children to complete. E.g., *The pencil is...* (point to the number and inches). Let the children finish the sentence.

Step 5:

Who would like to pull the next item that we will measure from my bag?

Step 6:

Discuss the words to Ivan's favorite song. Sing it. Repeat, allowing children to suggest gestures for lyrics like short, long, medium.

Opposites Dance

Skills Focus: pattern

Vocabulary: si, hola, end, girls, boys, chores

Arts Vocabulary: cue, song, steady rhythm, dance, lyrics

Procedure

Step 1:

Establish opposites with your child. A fun way to play with “fill in the blanks/rhyming words” is through “The Opposites Song” (to the tune of “Twinkle, Twinkle”):

Opposites, opposites all around,
When I wear a smile,
You wear a frown.
When I say yes,
You say no.
When I say stop,
You say go.
Opposites, opposites all around,
When I wear a smile,
You wear a frown.

Step 2:

You may use coffee can theater to introduce a doll whom you will call Pablo. Pablo lives far away in a place called Mexico. Clap out the number of syllables in “Mexico.”

He needs our help with his chores. He can't finish them alone because whenever he hears a steady rhythm, he starts to dance. Who knows what chores are? Who does chores? Name a chore that you do.

As each child names a chore, make a simple, three-word chant. For example, if a child says, “I make the bed,” create a motion and add a chant. Model it and ask the class to repeat it—e.g., *Make my bed! Make my bed! Make my bed!* You may want to clap or play a steady beat with a drum during the chant.

Step 3:

Tell the children what chores Pablo does. Explain that Pablo tries to do his chores, but he always ends up doing the opposite. He tries to clean upstairs, but forgets and goes downstairs. He tries to clean inside, but forgets and goes outside. Make a rhythm out of the back-and-forth sequence and invite the children to dance when they hear the steady beat. Repeat.

*Inside and outside
Inside and outside
'Til he heard that steady rhythm
And he started to dance!*

*(Let's do it!)
Inside and outside*

Inside and outside
Inside and outside
Inside and outside...

Teacher: *Until he heard...*

Children: *Pablo!*

Teacher: *Then she called him...*

Children: *Pablo, Pablito!*

Teacher: *She asked...*

Children: *Are you working?*

Teacher: *And he answered...*

Children: *Yes!*

Teacher: *But was he working?*

Children: *No.*

Teacher: *What was he doing?*

Children: *Dancing!*

Step 4:

Ask children for another chore they would like to help Pablo with. Guide them to the creation of the opposite and create the chant.

Suggested Books

- *Giraffes Can't Dance* by Giles Andreae
- *Tonight is Carnival* by Arthur Duros

Animal Concert

Skills Focus: non-standard measurement

Vocabulary: length, long, short, longer, shorter, sound, cue, animals (and their various names)

Arts Vocabulary: cue, section, sound

Materials: laminated animal pictures, masking tape

Procedure

Step 1:

Use imaginary travel to take the children to the zoo for an animal concert by the famous animal band. Discuss which animals we expect to see. Ask the class to demonstrate the sound that each of these animals makes.

Step 2:

Upon arrival, we learn that there's a problem! *Someone left the barn door open and all of the animals have run away. They need us to help with the show. I'll hand out costumes, and we will line up according to the length of the sound your animal makes.*

Using the masking tape, make a divider in the middle of the floor. Tape a short line at the top of one side and a long line at the top of the other. Tell the children that long animal sounds stand on one side, and short animal sounds stand on the other side.

Step 3:

Pull laminated pictures from your bag. *What animal is this? What sound does it make? Is that a long or short sound? Which side should you stand on?*

Step 4:

Now the concert can begin.

Song: *Friends on the Farm*

(Sung to the tune of "Wheels on the Bus")

My friends on the farm sing all day long,
Some sing short, some sing long.
My friends on the farm sing all day long,
For Farmer Teacher.

Extension:

Have children make their animal sound on cue.

Have children make a series of patterns with the long and short sounds of their animals.

Using index cards, draw long and short lines (1 per card) and shuffle them. Allow the children to write their own arrangements for the class to sing.

Suggested Books

- *On the Farm* by David Elliott
- *The View at the Zoo* by Kathleen Long Bostrom

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Presenter's Biography

International recording artist and Newark, NJ native Wincey Terry-Bryant has performed with industry giants like Sting and Tina Turner. She was a featured vocalist on the hit single "It's A Shame," and her voice can be still heard on the children's series "Sesame Street." Television credits include: "Soul Train," "The B.E.T. Dr. Bobby Jones Birthday Tribute," and "The Cosby Show." Wincey has opened for gospel greats like Dorothy Norwood and Tamela Mann.

Resident artist for the New Jersey Performing Arts Center, presenter of arts-integration assembly programs for Arts Horizons, and New Jersey Wolf Trap Master Teaching Artist, she is CEO of Winceyco LLC and Executive Director of the non-profit organization NanaBabies. Wincey won Kiss FM's "Phenomenal Woman" award, Women in Media's Human Rights Activist award, and the Zeta Phi Beta Woman of The Year Award for her innovative arts and human trafficking awareness programs.

Each year, the publishing arm of her company, Winceycobooks, turns writers into published authors. Wincey is a children's book author, a producer of music and educational CDs, Arts Chair of the NJ Human Trafficking Coalition, and Vice President of Zonta International, Essex County Chapter.



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