

# Math Skills and Definitions

## Vocabulary Building—

**Free Exploration**—becoming aware of and developing vocabulary for attributes and properties of materials

**Vocabulary:** big, little, fast, slow, hot, cold, rough, smooth, few, many, large, small, thick, thin, hard, soft, liquid, solid, wet, dry

**Spatial Relationships**—understanding position and direction

**Vocabulary:** above, below, on top of, high, low, top, up, down, middle, bottom, far, near, next to, over, around, behind, on, off, start, under, away, down, first, next, last, here, there, beside, end, forward, outside

## Readiness Skills—

**Classification**—sorting and grouping items

**Vocabulary:** alike, different, not, set, sort, classify, group, regroup, shape, color, member, same, size

**Patterning**—recognizing, copying, extending and creating the repetition of specific items. It is also the increase or decrease of a constant amount, for example, a stairway.

**Vocabulary:** pattern, before, beginning, end, continue, extend, copy, create, next, pattern, repeat

**One to One Correspondence**—pairing or matching objects to determine the size of a set using the terms greater than, less than, or equivalent to

**Vocabulary:** equal, equal to, equivalent, fewer, fewer than, greater than, less

than, more, one to one, same, equal to, fewer, greater, less, member, more than, pair, set

**Ordering**—organizing materials and information in a specific order based on relationship

**Vocabulary:** big, bigger, biggest, heavy, heavier, heaviest, long, longer, longest, small, medium, large, short, shorter, shortest, top, middle, bottom, first, next, last, light, lighter, lightest, most, least, small, smaller, smallest, tall, taller, tallest

## Numeration Skills—

**Numeration**—understanding the "manyness" of a number and assigning a numeral to that number

**Vocabulary:** adding on, addition, counting on, empty set, equals, five, four, member, minus, none, number, number family, numeral, one, plus, set, subtraction, sum, symbol, two, three

**Shapes**—recognition of geometric figures by distinguishing the similarities and differences of their attributes

**Vocabulary:** shapes, circle, square, triangle, rectangle, oval, side, corner, curved lines, straight lines

**Zero**—empty set

**Vocabulary:** none, set, empty set,

## Free Exploration (Naming attributes)

### Songs

#### If You're Clever

**Tune:** If You're Happy and...

If you're clever and you know it

Point to a circle

If you're clever and you know it

Point to a circle

If you're clever and you know it

Then your brain will help you show it

If you're clever and you know it

Point to a circle.

If you're clever and you know it

Point to a square

If you're clever and you know it

Point to a square

If you're clever and you know it

Then your brain will help you show it

If you're clever and you know it

Point to a square.

Continue with other shapes and colors

#### Catalina Magnalina

She had a peculiar name but she wasn't to blame.

She got it from her mother, who's the same, same, same.

Chorus

Catalina Magnalina, Hootensteiner

Bogentwiner

Hogan Logan Bogan was her name.

She had two peculiar teeth in her mouth,  
One pointed north and the other pointed south.

Chorus

She had two peculiar eyes in her head,  
One was purple and the other was red.

## Games and Dances

### I Spy

**Directions:** Invite children to find items in the room. Start with easy-to-find things so children can have a high level of success. Increase the difficulty as children become familiar with the game and more aware of attributes.

### Chants and Rhymes

#### Sometimes

Sometimes I am tall, (*stand tall*)

Sometimes I am small. (*crouch low*)

Sometimes I am very, very, tall.

(*stand on tiptoes*)

Sometimes I am very, very small.

(*crouch and lower head*)

Sometimes tall, (*stand tall*)

Sometimes small. (*crouch down*)

Sometimes neither tall or small.

(*stand normally*)

### Spatial Relationships

### Songs

**Hands and Fingers** Pam Schiller

Hands **up**, hands **down**,

Hands twirling **round** and **round**.

Fingers **up** and fingers **down**,

Fingers dancing **on** the ground.

Dance your fingers **through** the air,

**On** your knees, and **in** your hair.

Dance your fingers **here** and **there**,

Dance your fingers **everywhere**.

Hide your hands **between** your knees,

Fly them **out** like buzzing bees.

**Behind** your back, one, two three,

Where, oh where can your fingers be?

Bring those fingers back **in** sight,

Fly them **left** and fly them **right**.

**Around** and **around** and **around** they go,

Now place them **in** your lap just so.

### **On Top of Spaghetti**

**Tune:** On Top of Old Smokey

On top of spaghetti all covered with cheese  
I lost my poor meatball when somebody sneezed.

It rolled off the table and onto the floor,  
And then my poor meatball rolled out of the door.

It rolled in the garden and under a bush.  
And then my poor meatball was nothing but mush.

The mush was as tasty as tasty could be.  
And early next summer it grew into a tree.

The tree was all covered with beautiful moss.  
It grew lovely meatballs and tomato sauce.  
So if you eat spaghetti all covered with cheese,  
Hold on to your meatball and don't ever sneeze.

### **Grand Old Duke of York**

The grand old Duke of York (*salute*)  
He had ten thousand men.

(*hold up ten fingers*)

He marched them up to the top of the hill (*point up*)

And he marched them down again.

(*point down*)

And when they're up, they're up.

(*stand tall*)

And when they're down, they're down.

(*squat*)

But when they're only half way up,

(*stoop down*)

They're neither up nor down.

(*open arms and shrug*)

### **Green Grass Grew All Around**

There was a hole in the middle of the ground,

Oh, the prettiest hole you ever did see.

The hole's in the ground,

And the green grass grew all around, all around,

And the green grass grew all around.

And in that hole there was a sprout,  
Oh, the prettiest sprout you ever did see.

Sprout in the hole,

Hole in the ground,

And the green grass grew all around, all around,

And the green grass grew all around.

Continue with these items:

And from that sprout there grew a tree...

And on that tree there was a branch...

And on that branch there was a nest...

And in that nest there was an egg...

And in that egg there was a bird...

### **Games and Dances**

#### **Amazing Mazes**

**Directions:** *Create a maze with boxes, chairs, sheets, and pillows. Encourage children to navigate the maze. Ask them to describe their movements through the maze.*

#### **Go In and Out the Windows**

**Directions:** *IT walks around circle, weaving in and out between children.*

Go in and out the windows.

Go in and out the windows,

Go in and out the windows,

As we have done before.

Stand and face you partner. . .

(*IT chooses a partner*)

Now follow her/him to London. . .

(*IT and partner weave through circle*)

Bow before you leave her/him. . .

(*IT leaves partner and joins circle.*

*Partner becomes new IT)*

#### **Hokey Pokey**

**Directions:** *Form a circle and follow the directions in the song.*

You put your right hand in

You take your right hand out.

You put your right hand in

And you shake it all about.

You do the Hokey Pokey (*hold hands in the air and shake them*)  
And you turn yourself around.  
That's what it's all about.

*Repeat verses, using other body parts.*

### **Leap Frog**

Select one child to be "the frog." Have the other children get on the floor on their hands and knees and crouch down. Invite the frog to leap over the children by placing her hands on the back of each child for support while she straddles her legs around their body.

### **Chants and Rhymes**

#### **Where Do You Wear Your Ears?**

Where do you wear your ears?  
Underneath your hat?  
Where do you wear your ears?  
Yes ma'am, just like that.  
Where do you wear your ears?  
Say where, you sweet, sweet child.  
Where do you wear your ears?  
On both ends of my smile!

### **Classification**

#### **Songs**

**Color Song** Pam Schiller  
**Tune:** I've Been Workin' on the Railroad  
Red is the color for an apple to eat.  
Red is the color for cherries, too.  
Red is the color for strawberries.  
I like red, don't you?

Blue is the color for the big blue sky.  
Blue is the color for baby things, too.  
Blue is the color of my sister's eyes.  
I like blue, don't you?

Yellow is the color for the great big sun.  
Yellow is the color for lemonade, too.  
Yellow is the color of a baby chick.  
I like yellow, don't you?

Green is the color for the leaves on the trees.

Green is the color for green peas, too.  
Green is the color of a watermelon.  
I like green, don't you?

Orange is the color for oranges.  
Orange is the color for carrots, too.  
Orange is the color of a jack-o-lantern.  
I like orange, don't you?

Purple is the color for a bunch of grapes.  
Purple is the color for grape juice, too.  
Purple is the color for a violet.  
I like purple, don't you?

#### **Sing a Song of Attributes** Pam Schiller

**Tune:** Mary Had a Little Lamb

**Directions:** *Either point to things in the room that match each attribute, or provide items to hold up that are representative of each attribute.*

This is big. This is small  
This is big. This is small.  
This is big. This is small.  
Sing along with me.

Additional verses:

This is less. This is more...  
This is tall. This is short...  
This is short. This is long...  
This is many. This is few

#### **Games and Dances**

##### **People Hunt**

**Directions:** *Make a list of personal descriptors that will describe several group members, such as green eyes, brown hair, and tennis shoes. Invite the children to classify and reclassify the group by single descriptors. First make a category of people with green eyes. Put the group back together and make a category of people with brown hair. Put the group back together and make a category of people with two arms.*

*Reconnect the group and make a category of people wearing tennis shoes. Does anyone in the group fit all four descriptors?*

**Rainbow Dancers** Pam Schiller

**Tune:** Where Oh, Where Is Sweet Little Susie?

**Materials:** Streamers or ribbons

**Directions:** Provide red, yellow, orange, green, purple and blue streamers or ribbons. Allow children to select their favorite color of streamer. Instruct children to group by color, listen for their color to be called and then follow the directions.

Rainbow dancers let's get ready  
Hold your ribbons nice and steady.  
You'll hear the colors of the rainbow.  
Listen for your time to go.

Shake red... (spoken)  
Shake orange...  
Shake yellow...  
Shake green...  
Shake blue...  
Shake purple...

Red ribbons turn around,  
Orange ribbons up and down.  
Yellow ribbons reach up high,  
Green ribbons fly, fly, fly.

Everybody dance (spoken)

Rainbow dancers, dance around,  
Ribbons swirl up and down.  
Overhead and on the ground,  
Rainbows flying all around.

Shake purple... (spoken)  
Shake blue...  
Shake green...  
Shake yellow...  
Shake orange...  
Shake red...

Blue ribbons tickle your nose,

Purple ribbons touch your toes.  
Everybody dance around,  
Swirl your ribbons up and down.

Rainbow dancers dance around,  
Ribbons swirl up and down.  
Rainbow dancers hug a friend,  
Our colorful dance is at an end.

## **Chants and Rhymes**

### **Carousel**

**Directions:** *Invite the children to help create a human carousel. Divide the class into four groups. Assign activities to each group as follows.*

- Group 1: say, "um-teedle-le-dee" while repeatedly turning in a circle
- Group 2: say, "um-pa-pa" while repeatedly swaying side to side
- Group 3: say, "um-sssh-sssh" while repeatedly bending at the knee
- Group 4: hum any song that you typically hear at a circus or on a carousel. "Wedding of the Winds" by John T. Hall (composer) works well. You can hear a sample of this song on Amazon on the *Under the Big Top: 100 Years of Circus Music* CD.

# Patterning

## Songs

### **Head, Shoulders, Knees, and Toes**

**Directions:** *Touch body parts as they are mentioned in the song*

Head and shoulders, knees and toes,  
Knees and toes, knees and toes.  
Head and shoulders, knees and toes,  
Eyes and ears and mouth and nose.

### **I Met a Bear**

The other day, I met a bear,  
A great big bear, Oh way out there.

Chorus:

(Same lines in unison-echo)

He looked at me, I looked at him,  
He sized up me, I sized up him.

(Echo)

He said to me, "Why don't you run?  
I see you ain't, got any gun."

(Echo)

I says to him, "That's a good idea."  
"Now legs get going, get me out of here!"

(Echo)

And so I ran, Away from there,  
But right behind me, Was that bear.

(Echo)

In front of me, There was a tree,  
A great big tree, Oh glory be!

(Echo)

The lowest branch, Was ten feet up,  
So I thought I'd jump, And trust my luck.

(Echo)

And so I jumped, Into the air,  
But I missed that branch, A way up there.

(Echo)

Now don't you fret, And don't you frown,  
I Caught that branch, On the way back down!

(Echo)

This is the end, There ain't no more,  
Unless I see, That bear once more.

(Echo)

### **These Bones** Schiller and DeVolder

**Tune:** Alice's Camel

**Materials:** Rhythm Sticks

**Directions:** Children are sitting cross-legged on the floor with a rhythm stick in each hand. Students strike the bottom of the rhythm sticks on the floor on either side of them. Then they strike the sticks together in front of them.

**Spoken:** Get your rhythm sticks ready.

We're going to tap a pattern to accompany our song about bones.

When the lyrics say, "these bones, these bone dance all around" you can tap your sticks freely. When the lyrics say one bone is connected to another bone you will tap to this pattern:

*Floor, cross, floor, floor, cross*

**Spoken:** Tap freely.

These bones, these bones, dance all around.

These bones, these bones, dance all around.

These bones, these bones, dance all around.

Diggin' those dinosaur bones!

**Spoken:** Here's the pattern.

*Floor, together, floor, floor, together*

The foot bone's connected to the leg bone,

The leg bone's connected to the knee bone,

The knee bone's connected to the thigh bone,

Diggin' those dinosaur bones!

These bones, these bones, dance all around.

These bones, these bones, dance all around.

These bones, these bones, dance all around.

Diggin' those dinosaur bones!

**Spoken:** Here's the pattern.

*Floor, together, floor, floor, together*

The thigh bone's connected to the back bone,

The back bone's connected to the neck bone,

The neck bone's connected to the head bone,

Diggin' those dinosaur bones!

These bones, these bones, dance all around.

These bones, these bones, dance all around.

These bones, these bones, dance all around.

Diggin' those dinosaur bones!

### **Games and Dances**

#### **Duck, Duck, Goose**

**Directions:** *Children sit in a circle. One child—IT—walks around the outside of the circle, tapping each player on the head and saying "Duck." Eventually IT taps a player and says "Goose" instead. The tapped player gets up and chases IT around the circle. If she taps IT before they get around the circle, she gets to go back to her place. If she doesn't, she becomes the new IT and the game continues.*

#### **Bunny Hop**

*Children stand in line with their hands on the waist of the child in front them. Everyone moves around the room to music, hopping in unison. (Pattern: Kick left twice, kick right twice, hop three times—repeat)*

#### **Movement Relay**

**Directions:** *Divide the class into three or four groups. Create a series of movements such as touch your toes, clap your hands, and put your hands on your head. Have one child in each group*

*repeat the pattern and then signal the next child with a tap on the shoulder. See which group can finish the activity first.*

### **Chants and Rhymes**

#### **Peas Porridge Hot**

**Directions:** *Have each child stand with a partner and complete this clapping pattern; clap own hands on thighs, clap own hands together, clap both hands with partners hands)*

Peas porridge hot

Peas porridge cold

Peas porridge in the pot

Nine days old.

Some like it hot.

Some like it cold.

Some like it in the pot

Nine days old.

# One-to-One Correspondence

## Songs

### **Where Is Thumbkin?**

Where is Thumbkin?  
*(hands behind back)*  
Where is Thumbkin?  
Here I am. Here I am.  
*(bring out right thumb, then left)*  
How are you today, sir?  
*(bend right thumb)*  
Very well, I thank you.  
*(bend left thumb)*  
Run away. Run away.  
*(put right thumb behind back, then left thumb behind back)*

Other verses:  
Pointer, Middle One, Ring Finger, Pinky

### **Three Bears Rap**

Adapted by Pam Schiller  
Shh, shh, shh, shh, shh, shh, shh, shh, shh, shh.  
*(Snap fingers.)*  
Out in the forest in a wee little cottage  
lived the three bears.  
Shh, shh, shh, shh, shh, shh, shh, shh, shh, shh.  
One was the Mama Bear, one was the  
Papa Bear, and one was the wee bear.  
*(Hold up 1, 2, and then three fingers.)*  
Shh, shh, shh, shh, shh, shh, shh, shh, shh, shh.  
*(Snap fingers)*

Out of the forest came a walking,  
talking, pretty little Goldilocks  
*(walk in a sassy style)*  
and upon the door she was a-knockin'.  
*(clack, clack, clack)* *(Pretend to knock.)*

But no one was there, unh-unh, no one  
was there. *(Shake index finger)*  
So she walked right in without a care.  
*(Walk fingers.)*

She didn't care, unh-unh, she didn't  
care. *(Shake head-no.)*

One---two---three bowls of porridge she  
spied. *(Hold up 1, 2, and then 3 fingers.)*  
A slurp from Papa's bowl--"Too hot," she  
cried *(Pretend to sip from a spoon.)*  
A slurp from Mama's bowl—"Too cold,"  
she cried. *(Repeat)*  
Baa baa ba-rebare the slurp from the  
wee bowl was just right!  
*(Shake hands over head.)*  
*(glug, glug, glug)* *(Pretend to eat.)*

One---two---three comfy beds she spied  
*(Hold up 1, 2, and then 3 fingers.)*  
A bounce on Papa's bed, "Too hard,"  
she cried. *(Bounce)*  
A bounce on Mama's bed, "Too soft,"  
she cried. *(Repeat)*  
Baa baa ba-rebare the bounce on the  
wee bed was just right!  
*(Shake hands over head.)*  
*(Zzz-zzzz-zzzz)* *(Pretend to sleep.)*

Home, home, home, came the three  
bears. *(Snap fingers.)*  
"Someone's been eating my porridge,"  
said the Papa Bear.  
*(Touch left hand to right elbow)*  
"Someone's been eating my porridge,"  
said the Mama Bear. *(Repeat)*  
"Baa-baa ba-rebear," said the little Wee  
Bear. *(Shake hands over head.)*  
"Someone's asleep in my bed."  
Whaa! *(Clap)*

Just then Goldilocks she woke up, *(snap fingers)*, she broke up *(snap fingers)*,  
the party, and she beat it out of there.

"Good-bye, good-bye, good-bye," said  
the Papa Bear. *(Wave goodbye)*  
"Good-bye, good-bye, good-bye," said  
the Mama Bear. *(Wave goodbye)*  
"Baa-baa ba-rebear," said the little Wee  
Bear. *(Shake hands over head)*

That's the story of the three little bears—  
yeah!

(Brush right hand over the palm of the  
left hand.)

### **Games and Dances**

#### **Shadow Dancing**

**Directions:** *Provide a light source such as an overhead projector or a lamp. Place the light source in an area of the room where there is a clear space between the light source and a bare classroom wall. Invite the children to dance one at a time between the light source and the wall. Point out the one to one correspondence of the child to her shadow. Invite two or three children to create shadows on the wall. Again point out the one to one correspondence of shadows to children.*

#### **Back-to-Back Lifts**

**Directions:** *Each child selects a partner. Point out the one to one relationship of partners. Children stand back to back and lock elbows. Children attempt to stand by pushing against each other as they rise.*

#### **On and Off**

**Directions:** *Place a sheet of paper in the middle of the floor. Invite children to toss a beanbag to land on the paper. Have them record with tally marks how many times their beanbag lands on the paper and how many times it lands off the paper. Point out the one to one correspondence of marks to tosses.*

### **Chants and Rhymes**

#### **Family Music**

Mother plays the violin,  
*(pretend to play instruments)*  
Father plays the flute.  
Little Richele plays the horn,  
Toot, toot, toot, toot, toot!  
*(substitute student's names)*

#### **My Apple**

Look at my apple, it is nice and round.  
*(cup hands)*  
It fell from a tree, down to the ground.  
*(move fingers in a downward motion)*  
Come, let me share my apple, please  
do! *(beckoning motion)*  
My mother can cut it half in two—  
*(slicing motion)*  
One half for me and one half for you.  
*(hold out two hands, sharing halves)*

#### **This Little Piggy**

**Directions:** *Wiggles toes from big to little with each line of the rhyme.*  
This little piggy went to market,  
This little piggy stayed home,  
This little piggy had roast beef,  
This little piggy had none,  
And this little piggy cried “Wee-wee-  
wee!” all the way home.

## Order and Sequence

### Songs

#### **Peanut Butter**

Chorus:

Peanut, peanut butter—jelly!

Peanut, peanut butter—jelly!

First you take the peanuts and

*(pretend to dig peanuts)*

You dig 'em, you dig 'em.

Dig 'em, dig 'em, dig 'em.

Then you smash 'em, you smash 'em.

*(pretend to smash peanuts)*

Smash 'em, smash 'em, smash 'em.

Then you spread 'em, you spread 'em.

*(pretend to spread the peanuts)*

Spread 'em, spread 'em, spread 'em.

Chorus

Then you take the berries and

*(pretend to pick berries)*

You pick 'em, you pick 'em.

Pick 'em, pick 'em, pick 'em.

Then you smash 'em, you smash 'em.

*(pretend to smash berries)*

Smash 'em, smash 'em, smash 'em.

Then you spread 'em, you spread 'em.

*(pretend to spread berries)*

Spread 'em, spread 'em, spread 'em.

Chorus

Then you take the sandwich and

You bite it, you bite it.

*(pretend to bite a sandwich)*

Bite it, bite it, bite it.

Then you chew it, you chew it.

*(pretend to chew a sandwich)*

Chew it, chew it, chew it.

Then you swallow it, you swallow it.

*(pretend to swallow)*

Swallow it, swallow it, swallow it.

Hum chorus.

#### **On The First Day of Summer**

Pam Schiller

**Tune:** The Twelve Days of Christmas

On the first day of summer my doggie brought to me

A branch from a sycamore tree.

On the second day of summer my doggie brought to me

Two chewed up bones,

And a branch from a sycamore tree

On the third day of summer my doggie brought to me

Three squeaky toys

Two chewed up bones,

And a branch from a sycamore tree.

On the fourth day of summer my doggie brought to me

Four bouncing balls

Three squeaky toys,

Two chewed up bones,

And a branch from a sycamore tree.

On the fifth day of summer my doggie brought to me

Five playful puppies

Four bouncing balls,

Three squeaky toys,

Two chewed up bones,

And a branch from a sycamore tree.

On the sixth day of summer this is what I said- "Stop!

I love the branch, the balls, the toys, the bones and the puppies—Now I have something for you. Hug, hug, hug, kiss, kiss, kiss!

### Games and Dances

#### **Tooty Ta** (Echo Chant)

Chorus: A tooty ta, a tooty ta, A tooty ta ta.

Thumbs up . . .

Elbows back . . .

Feet apart . . .

Knees together . . .

Bottoms up . . .

Tongue out . . .

Eyes shut . . .  
Turn around . . .

### **Chants and Rhymes**

#### **Little Ball**

A little ball,  
*(make a circle with your fingers)*  
A bigger ball,  
*(make a circle with you hands)*  
A great big ball I see.  
*(make a circle with your arms)*

Are you ready to count them?  
One, *(make a circle with your fingers)*  
Two, *(make a circle with you hands)*  
Three. *(make a circle with your arms)*

#### **When I Was One**

When I was one I was so small,  
*(hold up one finger)*  
I could not speak a word at all.  
*(shake head)*  
When I was two, I learned to talk.  
*(hold up two fingers)*  
I learned to sing, I learned to walk.  
*(point to mouth and feet)*  
When I was three, I grew and grew.  
*(hold up three fingers)*  
Now I'm four and so are you!  
*(hold up four fingers)*

#### **Five Little Pumpkins**

*(Suit actions to words)*  
Five Little Pumpkins sitting on a gate.  
First one said, "It's getting late."  
Second one said, "There're witches in  
the air."  
Third one said, "We don't care."  
Fourth one said, "Let's run, let's run."  
Fifth one said, "Oh, it's just Halloween  
fun."  
But whooo went the wind and out went  
the light *(blow)*  
And five little pumpkins rolled out of  
sight. *(roll hand over hand)*

#### **Five Waiting Pumpkins**

*(suit actions to words)*  
Five little pumpkins growing on a vine,  
First one said, "It's time to shine!"  
Second one said, "I love the fall"  
Third one said, "I'm round as a ball."  
Fourth one said, "I want to be a pie."  
Fifth one said, "Let's say good-bye."  
Good-bye said one!  
Adios said two!  
Au revoir said three!  
Ciao said four!  
Aloha said five!  
And five little pumpkins were picked that  
day!

#### **Five Little Cowboys** Pam Schiller

Five little cowboys sitting on a gate.  
The 1st one said, "This rodeo's great!"  
The 2nd one said, "I love the clowns."  
The 3rd one said, "I like the sounds."  
The 4th one said, "Can you ride a bull."  
The 5th one said, "No, ...but it sure  
looks cool!"

Then buzz went bell and the gate flew  
open  
And off went the cowboys ridin' and  
ropin'.

## Numeration

### ***Numeral Recognition***

#### **Games and Dances**

**Numeral Dance** Pam Schiller

**Tune:** Do Your Ears Hang Low?

**Directions:** Place a numeral necklace on each child or a magnetic numeral in each child's hand. Children move when they hear their numeral called.

The numeral dance is fun  
It starts with numeral one.  
There's a move for you  
And that's all you have to do  
So gather near  
Your numeral you will hear  
Then you can dance with me.

Can you wiggle numeral one?  
Its time to have some fun.  
Can you tap numeral two?  
You know what to do.  
Can you twist numeral three?  
As twisty as can be  
Come and dance with me.

Can you float numeral four?  
Can you soar across the floor?  
Can you spin numeral five?  
Let's all do a little jive  
Can you slide numeral six?  
Show us all your little tricks  
Come and dance with me.

Can you snap numeral seven  
Let's keep the party revin  
Can you shake numeral eight  
You're all lookin really great  
Can you shimmy numeral nine  
You're lookin mighty fine  
Come and dance with me.

## **Pair, Think and Share**

**Directions:** *Have children select a partner. Challenge partners to make numerals using their bodies*

## **Counting**

### **Songs**

#### **Ten Croaking Frogs**

**Tune:** Ten Little Indians

One little, two little, three little froggies,  
Five little, six little, seven little froggies,  
Eight little, nine little, ten little froggies,  
Croak, croak, croak, croak, bur-rump!

#### **Hickory Dickory Count** Pam Schiller

**Tune:** Hickory Dickory Dock

Hickory dickory dock  
Its time to move with the clock  
The clock strikes one  
Its time for fun  
Hickory dickory dock

Hickory dickory dock  
Can you clap with the clock?  
The clock stikes two  
Clap one --- clap two  
Hickory dickory dock.  
Clap two. (one...two)

Hickory dickory dock  
Now let's jump with the clock  
The clock strikes three  
Jump one—jump two—jump three  
Hickory dickory dock.  
Jump three. (one...two...three)

Hickory dickory dock  
We can hop with the clock  
The clock strikes four  
Hop one—hop two---hop three---hop  
four  
Hickory dickory dock.  
Jump four. (one...two...three...four)

Hickory dickory dock  
Now let's step with the clock  
The clock strikes five

Step one—step two---step three—step  
four---step five  
Hickory dickory dock.  
Step five.  
(one...two...three...four...five)

Hickory dickory dock  
We had some fun with the clock  
The clock is still  
Its time to stop  
Hickory dickory dock.

### **The Ants Go Marching**

The ants go marching one by one  
Hurrah, hurrah.  
The ants go marching one by one  
Hurrah, hurrah.  
The ants go marching one by one,  
The little one stops to suck his thumb.  
And they all go marching down  
To the ground  
To get out  
Of the rain.  
BOOM! BOOM! BOOM! BOOM!

Two. . . tie her shoe. . .  
Three. . . climb a tree. . .  
Four. . . shut the door. . .  
Five. . . take a dive. . .

### **Ram Sam Sam**

**Tune:** Traditional

A ram sam sam  
*(Hit one fist on top of the other)*  
A ram sam sam  
*(Hit opposite fist on top of the other)*  
Goolie, goolie goolie, goolie  
*(Roll hands-arm over arm or pull hands  
apart as if pulling taffy))*  
Ram Sam Sam  
*(Hit fists again)*  
A-raffy A-raffy  
*(Lift arms)*  
Goolie goolie goolie, goolie  
*(Roll hands again)*  
Ram sam sam!  
*(Hit fists again)*

Two dancing dogs  
Two dancing dogs  
Goolie, goolie, goolie, goolie  
Two dancing dogs  
Two dancers! Two dancers!  
Goolie, goolie, goolie, goolie  
Two dancing dogs!

Three tumbling stones...Three tumblers  
Four laughing clowns...Four laughers  
Five stomping giants...Five stompers

### **Over in the Meadow**

Over in the meadow, in the sand, in the  
sun,  
Lived an old mother frog and her little  
froggie one.  
“Croak!” said the mother; “I croak!” said  
the one,  
So they croaked and they croaked in the  
sand, in the sun.

Over in the meadow, in the stream so  
blue,  
Lived an old mother fish and her little  
fishies two.  
“Swim!” said the mother; “We swim!”  
said the two.  
So they swam and they swam in the  
stream so blue.  
Over in the meadow, on a branch of the  
tree,  
Lived an old mother bird and her little  
birdies three.  
“Sing!” said the mother; “We sing!” said  
the three,  
And they sang and they sang on a  
branch of the tree.

### **Games and Dances**

#### **Hide and Seek**

**Directions:** *One child is IT. All other  
players hide while IT counts to ten. At  
the end of the count, IT gives a warning  
(Ready or not, here I come!) and then  
seeks out the hidiers.*

## **Number Jump**

**Directions:** *Instruct the children to stand. Tell them that they are to jump three times when you hold up three fingers and only when you hold up three fingers. Hold up one finger, then four fingers and finally three fingers. Continue to randomly hold up fingers from one to five until children tire of the game.*

## **One Potato, Two Potato**

**Directions:** *Make two fists, alternate tapping one on top of the other.*  
One potato, two potato,  
Three potato, four,  
Five potato, six potato,  
Seven potato, more.  
Eight potato, nine potato,  
Where is ten?  
Now we must count over again.

## **Chants and Rhymes**

### **One, Two, Buckle My Shoe**

One, two, buckle my shoe.  
Three, four, shut the door.  
Five, six, pick up sticks.  
Seven, eight, lay them straight.  
Nine, ten, a big fat hen.

### **Five Fingers on Each Hand**

I have five fingers on each hand,  
Ten toes on my two feet.  
Two ears, two eyes,  
One nose, one mouth,  
With which to sweetly speak.  
My hands can clap, my feet can tap,  
My eyes can clearly see.  
My ears can hear,  
My nose can sniff,  
My mouth can say I'm me.

### **Birthday Candles**

Birthday candles one – two – three-  
*(hold up finger on the count)*  
Birthday candles just for me!  
*(point to self)*

Last year three-next year four  
*(hold up 3 fingers and add one)*  
Birthday candles, I want more.  
*(hold up all fingers)*

## **Addition**

### **Songs**

#### **Three Birds Singing** Pam Schiller

**Tune:** Are You Sleeping?

**Directions:** *Select three children to be the birds. Have one child start the song, have another join in on the second verse and the third child join in on the third verse. You can add a final verse that says "many birds are singing."*

One bird singing, sweetly singing.

Tra la la

Tra la la

Lovely notes are ringing

Hear the bird(s) singing.

Tra la la

Tra la la

Tra la la la la

Tra la la la la

Two birds singing...

Three birds singing...

#### **Johnny Works with One Hammer**

Johnny works with one hammer,  
One hammer, one hammer.  
*(hammering motion with right hand)*

Johnny works with one hammer

Then he works with two.

Johnny works with two hammers...  
*(motion with left and right hands)*

Johnny works with three hammers, . . .  
*(motion with both hands and right foot)*

Johnny works with four hammers...  
*(motion with both hands and both feet)*

Johnny works with five hammers...  
*(motion with both hands, feet and head)*  
Then he goes to bed.

## Games and Dances

### **One Elephant**

One elephant went out to play.  
Out on a spider's web one day.  
He had such enormous fun,  
He called for another elephant to come.

**Directions:** *Children sit in a circle. One child is selected to be the first elephant. That child places one arm out in front to make a trunk, then walks around the circle while the group sings the song. When the group sings "called for another elephant to come," the first child chooses another child to become and an "elephant." The first child extends his free hand between his legs to make a tail. The second child extends one arm to make a trunk and grabs hold of the first child's tail. The two walk trunk to tail as the song continues. The second elephant will choose a third and so on until everyone is chosen. It works best to divide the class into two groups.*

### **Variation: One Dinosaur**

**Directions:** *Divide the children into small groups of four or five children. Have all the children take off their shoes so that they will be able to slide on the floor in their socks. Select a child to be the first dinosaur in each group. Encourage all the number one dinosaurs to slide on the floor as if they are ice-skating. At the end of the first verse have the first dinosaurs all select a second dinosaur to join in the fun.*

One dinosaur went out to play  
Out on an icy lake one day.  
He had such "slip-slidy" fun  
He called for another dinosaur to come.

Two dinosaurs went out to play....

## Chants and Rhymes

### **Five Little Fingers**

One little finger standing on its own.  
*(hold up index finger)*  
Two little fingers, now they're not alone.  
*(hold up middle finger)*  
Three little fingers happy as can be.  
*(hold up ring finger)*  
Four little fingers go walking down the street.  
*(hold up all fingers)*  
Five little fingers. This one is a thumb.  
*(hold up four fingers and thumb)*  
Wave bye-bye 'cause now we are done.

## **Subtraction**

### Songs

#### **Five Silly Monkeys**

Five silly monkeys  
Swingin' on a vine  
Laughin' in the tree tops  
Everything was fine  
But then the wind blew and one monkey fell  
Four silly monkeys swinging by their tail.

Four silly monkeys  
Swingin' on a vine  
Laughin' in the tree tops  
Everything was fine  
But then the wind blew and one monkey fell  
Three silly monkeys swinging by their tail.

Three silly monkeys  
Swingin' on a vine  
Laughin' in the tree tops  
Everything was fine  
But then the wind blew and one monkey fell  
Two silly monkeys swinging by their tail.

Two silly monkeys  
Swingin' on a vine  
Laughin' in the tree tops

Everything was fine  
But then the wind blew and one monkey  
fell  
One monkey swinging by his tail.

One silly monkey  
Swingin' on a vine  
Laughin' in the tree tops  
Everything was fine  
But then the wind blew and the monkey  
fell  
No more monkeys  
It's the end of this tale.

### **Five Little Speckled Frogs**

**Tune:** Traditional

**Directions:** *Five children sit in a row and the other children sit in a circle around them. All children act out the words to the song.*

Five little speckled frogs  
*(hold up five fingers)*  
Sitting on a speckled log  
Eating some most delicious bug.  
*(pretend to eat bugs)*  
Yum! Yum!  
One jumped into the pool,  
*(one child from center jumps back into the circle)*  
Where it was nice and cool.  
*(cross arms over chest and shiver)*  
Now there are four little speckled frogs  
Burr-ump!

*Repeat, counting down until there are no little speckled frogs.*

### **Games and Dances**

#### **Five Little Monkeys Jumping on the Bed**

Five little monkeys jumping on the bed.  
One fell off and bumped her head.  
Mamma called the doctor, and the  
doctor said,  
"No more monkeys jumping on the bed!"

*Repeat, subtracting a monkey each time. You can say the rhyme using fingers or let children act it out)*

#### **Musical Chairs**

**Directions:** *Place chairs in a circle, one chair for each child. Tell the children that they are to walk in a circle around the chairs until the music stops. When the music stops everyone is to find a chair to sit in. Begin the game. Randomly stop the music. When everyone is seated, point out the one to one correspondence of children to chairs. To help demonstrate unequal sets, you can offer one less chair than children. When the music stops the child without a chair is out of the game. Point out the unequal sets---there are more children than chairs.*

#### **Five Little Ladybugs**

Pam Schiller and Richele Bartkowiak  
Five little ladybugs dancing on the  
shore,  
One danced away and then there were  
four.  
Four little ladybugs dipping in the sea,  
One chased a fish and then there were  
three.  
Three little lady bugs admiring the view,  
One skipped off and then there were  
two.  
Two little ladybugs bathing in the sun,  
One flew home leaving only one.  
One little ladybug all alone,  
She called her friends on the telephone.  
They came back, now there's five  
To dance and sing the ladybug jive

## Shapes

### Songs

#### **Three Straight Sides**

**Tune:** Three Blind Mice

Three straight sides,  
Three straight sides,  
They follow the path that a triangle  
makes.

Three straight sides, that's all it takes,  
Three straight sides,  
Three straight sides.

#### **Rectangles**

Pam Schiller

**Tune:** Itsy Bitsy Spider

If you want to make a rectangle this is  
what you do.

You draw four sides and after that  
you're through.

If your sides are equal then you have a  
square.

Rectangles and squares we see them  
everywhere.

### Games and Dances

#### **Shape Match**

**Directions:** Cut small shapes from  
construction paper. Cut a set of larger,  
floor size, shapes from poster board or  
vinyl fabric. Lay the larger shapes on the  
floor in a random order. Tell the children  
that when you hold up a shape they are  
to tap their toe on the shape on the floor  
that matches the one you are holding.  
Make this game easier by coordinating  
the colors of the small shapes and  
larger shapes. Make it more difficult by  
making the smaller shapes and larger  
shapes different colors.

### Chants and Rhymes

#### **Window Watching**

See the window I have here,  
So big and wide and square.  
*(draw a square)*

I can stand in front of it,  
And see the things out there.  
*(shade eyes as if looking at something  
in the distance)*

## Zero

### Games and Dances

#### **Circle 'round the Zero**

**Directions:** *Children stand in a circle.  
One child begins the game by walking  
around the circle and selecting a friend  
to be the "lucky zero." Then follow the  
directions in the song. The selected  
child then walks around the circle and  
selects a new "lucky zero."*

Circle 'round the zero  
Find you're lucky zero'  
Back, back zero  
Side, side zero  
Front, front, zero  
Tap your lucky zero

### Chants and Rhymes

**Five Pink Valentines** Pam Schiller  
Five pink valentines from the card store,  
*(count off the valentines on your fingers)*  
I gave one to Sam, now there are four.  
Four pink valentines, pretty ones to see.  
I gave one to Maddie, now there are  
three.  
Three pink valentines, pink through and  
through,  
I gave one to Austin, now there are two.  
Two pink valentines having lots of fun,  
I gave one to Gabrielle, now there is  
one.  
One pink valentine, my story is almost  
done,  
I gave it to you, now there are none.