



COLORS, SHAPES & NUMBERS

#1: Learning About Numbers

SUMMARY: Help your child to become aware of numbers. To learn to count and to understand the meaning of numbers, your child needs to hear and see the order of numbers over and over again. So, point and count everything!

WORDS TO USE:

Number words - zero through ten

Count- to say numbers in order

Counting- the act of saying numbers in order

Order- an arrangement of things one after the other

Cardinal numbers- numbers used in counting to tell how many. One, two, three...

MATERIALS NEEDED:

Any everyday objects

Links from the Kit

ACTIVITIES TO DO WITH INFANTS AND TODDLERS: Adult can gently touch or wiggle fingers of infants while singing or chanting the rhymes. With toddlers the adult can model the actions and encourage them to do on their own along with you.

ACTIVITY #1: Singing and Counting

For infants, try counting toes, fingers, giving baby kisses.

For toddlers, try counting blocks, crayons, cereal, etc.

(Sing to the tune of "Ten Little Indians". You may substitute other words for fingers. For example, toes, tickles)

One little, two little, three little fingers,
Four little, five little, six little fingers,
Seven little, eight little, nine little fingers,
Ten fingers on two hands.

ACTIVITY #2: Little Fishes

One, two, three, four, five.
Once I caught a fish alive
Six, seven, eight, nine, ten.
Then I threw him back again.

Count on fingers
Hold up a pretend fish
Count on fingers
Throw fish back

ACTIVITY #3: Counting down

Start the activity by counting fingers; then move to counting objects like the links in the kit.

Five little cookies in the bakery shop,
Shining bright with sugar on top.
Along comes (child's name) with a nickel to pay.
S/he buys a cookie and takes it away.
Four...Three...Two... One...

DID YOU KNOW?

- The foundation of our knowledge of counting begins when babies learn to identify everyday objects and body parts.
- At first, children learn number names by imitation and they use them in random sequence.
- Gradually, they learn through time and practice to understand the idea of one-to-one correspondence, matching one object or action to one count, and so on.
- Singing counting songs and chants helps young children begin to recognize number words. Repetition reinforces learning!
- Pointing out numbers in your child's world will help them to recognize written numbers over other symbols.

SUGGESTED READING:

E Animal	Animal 1 2 3
E Baker	Big Fat Hen
E Carle	The Very Hungry Caterpillar
E Cronin	Click Clack 1 2 3
E Katz	Counting Kisses
E Katz	Ten Tiny Ticks
E Raffi	Five Little Ducks
E Twine	My Favorite Book of Numbers
E Watts	Numbers with Farm Animals
E Wells	Counting Peas



COLORS, SHAPES & NUMBERS

#2: Color Happy

SUMMARY: Practice using color words and developing object recognition through a fun song when dressing your child or playing with their favorite things.

WORDS TO USE:

Red Green Blue Yellow
Black Brown White Orange Purple

MATERIALS NEEDED:

Your child's clothing
Several of your child's favorite things which feature one main color

ACTIVITY #1: What Are You Wearing?

- Sing or chant a variation on the song 'Mary Wore Her Red Dress' as you dress your child.
- Be sure to use your child's name and hold up each article of clothing as you sing about it.

(Child's Name) wore his red shirt, red shirt, red shirt,
(Child's Name) wore his red shirt,
All day long (or to the park).

(Child's Name) wore her brown pants, brown pants, brown pants,
(Child's name) wore her brown pants,
All day long (or to the park).

(Child's Name) wore his white hat, white hat, white hat,
(Child's Name) wore his white hat,
All day long (to the park).

Sing about socks, shoes, hat, mittens, bib, etc.

ACTIVITY #2: The Color of My Favorite Things

- Use the same song, but be more creative by using some of your child's favorite objects. (For example, ball, blanket, car, teddy bear, bottle, etc).
- Hand the object to your child as you sing about it.

(Child's Name) played with his brown bear, brown bear,
(Child's Name) played with his brown bear,
All day long.

(Child's Name) rolled her purple ball, purple ball,
(Child's Name) rolled her purple ball,
All day long.

ACTIVITY #3: Color of the Day

- Choose one color to experience on a given day.
- Have both you and your child wear something in that color.
- Point to the color and tell your child its name. "(Child's name), you are wearing a yellow shirt. I am wearing a yellow shirt."
- Take a walk around a room or outside and identify other objects of that color.
- Let your child touch the item, when appropriate.
- For toddlers, ask your child to find something else in the room that is the same color. Offer help as needed but give your child time to look.

OBSERVATIONS

Talk with your child about colors. Ask questions: Do you like this color?

DID YOU KNOW?

- Babies are born seeing only black and white.
- The first color to emerge is red (around two-and-a-half months) followed by green, blue and yellow around five months.
- Reds, yellows, and oranges increase brain alertness. Blues, purples, and greens have a calming effect on the brain.
- Red increases appetite. Blue represses appetite.

SUGGESTED READING:

E Boynton	Blue Hat, Green Hat	
E Carle	Colors = Colores	
E Crews	Freight Train	
E Eck	Colors in My House	
E Hale	Baby Colors	
E Hoban	Red, Blue, Yellow Shoe	
E Katz	Baby's Colors	
E Peek	Mary Wore a Red Dress	(CD/BOOK)
E Pristash	Blue	
E Pristash	Green	
E Pristash	Orange	
E Pristash	Purple	
E Pristash	Red	
E Pristash	Yellow	
E Twine	My Favorite Book of Colors	



COLORS, SHAPES & NUMBERS

#3: Sorting

SUMMARY: Help your child to distinguish objects that are different and to categorize items into two groups. This activity is a simple introduction to the skill of classifying: putting objects into sets based on common attributes.

WORDS TO USE:

Classify – to arrange in groups based on similarities
Sort – to group by persons or things that have something in common
Number Words – zero through ten
Same – exactly alike
Different – not the same
In – inside an enclosed space
Out- away from the inside or middle of a place or thing
Color Words – red, green, blue, yellow, black, white, orange, purple

Activity #1: From birth to 12 months- Sorting Toys

MATERIALS NEEDED:

Baby toys- some that make noise and some that don't

- Hold a toy in each hand. One toy should make a sound; the other should not.
- Offer each toy by name. For example, 'Look (child's name), would you like the rattle (shake the rattle) or the doll (hold out the doll)?'
- Watch to see which toy your baby grabs. Your baby is beginning to sort. Talk to your baby about how they are different -one makes noise and the other doesn't.
- Place a noise making toy in each hand. Shake them in front of your child. Describe how they are the same-they both make noise.

Activity #2: From 13 months to 24 months- Sorting by Colors

MATERIALS NEEDED:

- 4-6 red blocks (or two solid colors)
- 4-6 yellow blocks
- 1 red box or container (wrap a shoe box with red paper)
- 1 yellow box or container (wrap a shoe box with yellow paper)
- 1 clear container

- Sit on the floor with your child and place all blocks in the clear container. Show your child the blocks and describe them.
- For instance, you might say 'Our blocks are square. We have red blocks and yellow blocks.' Encourage your child to explore them.
- Point out to your child the two different colors. "Look (Child's name), this block is red".
- Demonstrate putting a red block in one container. Say, "(Child's name), I'm putting the red block in the basket. Can you put a red block in the basket? Good job!
- If your child is more interested in just putting the blocks in randomly, that's okay. Keep the activity positive.

Activity #2: From 13 months to 24 months- Sorting Cups

MATERIALS NEEDED:

Stacking and Nesting Sensory Cups from the kit

- Decide which attribute you want to explore with your older toddler. For example, shape.
- Place two or three of each of the square-shaped cups and the round-shaped cups on the floor in a pile.
- Show your child a round cup and say what it is, 'This is a round cup.' Give it to your child to explore.
- Pick up a second round cup and say, 'Here's another round cup. Let's put it over here.'
- Invite your child to place his/her round cup next to the round cup you have just placed in your special spot.
- Ask your child to find another round cup from the pile. Give him/her time to try to find the correct cup. If he/she chooses a square cup, say 'That's a square cup. Let's put it over here in a separate place.'
- Invite your child to search again. Whichever cup he/she chooses, tell him its shape and ask where it should go. Tap the correct pile. Praise his/her efforts and say 'we are sorting our cups by shape. The round cups go in one pile and the square cups go in another!'
- Use the stacking cups to sort by color or pattern/no pattern.

DID YOU KNOW?

- Young children can sort by only one trait at first. For example, sort by color. But not color and shape at the same time.
- The opportunity to sort with your baby is all around: by color, by place, by ownership (yours, mine), size, etc.
- Classifying objects is a skill which your child will one day use for measurement, algebra and geometry.

SUGGESTED READING:

E Cousins	Pet Animals
E Eck	Colors in My House
E Pristash	Blue
E Pristash	Green
E Pristash	Orange
E Pristash	Purple
E Pristash	Red
E Pristash	Yellow
E Things	Things That Go
E Yoon	At the Beach
E Yoon	At the Farm
E Yoon	At the Park
E Yoon	In the Ocean



COLORS, SHAPES & NUMBERS

#4: Shapes Are Everywhere

SUMMARY: Shapes are everywhere in your child's world. Point out objects in your everyday environment and practice naming them by shape and describing them by their properties (for example, four sides that are alike).

WORDS TO USE:

Shape – the outer form of an object

Rectangle – a shape with four sides and four right angles

Square – a rectangle having four even sides

Triangle – a shape with three straight sides and three angles

Circle – a flat, perfectly round shape

Star – a shape with five or more points

Geometry – the branch of mathematics that deal with points, lines, angles, shapes, and solids

Straight - without a curve or a bend

Curve – to bend or turn continuously

Round – shaped like a circle, a sphere, or a cylinder

Sphere – a geometric solid shaped so that all points on its surface are the same distance from a center point

Cylinder – a hollow or solid object that is shaped like a tube or pipe

Side – a line or surface that forms a boundary

Length – the distance of a thing measured from one end to the other along the greatest dimension

MATERIALS NEEDED:

Anything in your child's environment, especially safe items your child can touch.

ACTIVITY:

- Point out to your child the different shapes you see during the day. For example, a piece of toast, a cookie, a book, etc. Look (child's name), your cookie is a circle.' Run your child's finger around the circle.
- Have a shape of the week. Make the chosen shape (circle, square, rectangle or triangle) in primary colors red, blue and yellow out of felt. Glue the felt shapes to a large piece of poster board. Lay the poster board on the floor or hang it on the wall at the infant's eye-level. When teaching shapes, point to the shapes as you say their names.

DID YOU KNOW?

- Exploring shapes through physical experiences help young children to better understand and retain abstract mathematical concepts.
- In addition to learning about mathematical thinking skills, children are learning skills that support reading and writing. They can recognize the shapes in letters and later, words.
- Learning about shapes also helps children understand other signs and symbols.

SUGGESTED READING:

E Basher	Shapes
E Do	Do You See Shapes?
E Eck	Shapes in My House
E Ehlert	Color Zoo
E Ehlert	Color Farm
E Emberley	My Shapes = Mis Formas
E Carle	My Very First Book of Shapes
E Twine	My Favorite Book of Shapes



COLORS, SHAPES & NUMBERS

#5: Patterns

SUMMARY: Patterns are all around us. Play with arranging words, sounds, objects or shapes in predictable ways. For very young children, their routines, and songs with repeated words, phrases, and actions are an introduction to the concept of patterns: the regular or repeated way in which something is done.

WORDS TO USE:

Line – an arrangement of people or things in a row

Repeat- the act of happening or being done again

Sequence – the order in which things are or should be connected or related

Order – the arrangement of objects or events in space or time

Pattern – the regular or repeated way in which something is done.

ACTIVITY #1: Play action songs with your child. Songs, especially children's, generally have a pattern.

This Old Man

This old man, he played one,
He played knick-knack on my thumb;
With a knick-knack paddywhack,
Give a dog a bone,
This old man came rolling home.

Clap baby's hands
Tap thumb
Clap baby's hands
Clap baby's hands
Roll baby's hands together

This old man, he played two,
He played knick-knack on my shoe;
With a knick-knack paddywhack,
Give a dog a bone,
This old man came rolling home.

Three...on my knee
Four...on my door
Five... on my hive
Six...on my sticks
Seven...up in Heaven
Eight...on my gate
Nine...on my spine
Ten...once again

Head and Shoulders Baby 1, 2, 3

Head and shoulders, baby
1, 2, 3
Head and shoulders, baby
1, 2, 3
Head and shoulders
Head and shoulders
Head and shoulders, baby
1, 2, 3

Touch appropriate body parts on baby
Clap baby's hands or tap on their belly

Knees and toes, baby
1, 2, 3
Knees and toes, baby
1, 2, 3
Knees and toes
Knees and Toes
Knees and toes, baby
1, 2, 3
(Make up other combinations of body parts)

Activity #2: Playing with Links

MATERIALS NEEDED:

Links from the kit

- Explore the shape links (circles, hands, and squares) from the kit.
- Show your child one of the links. Name and describe what it is. For example, say '(child's name), here's a square link. It has four sides.' Let your child play with the link.
- Take a second but different shaped link. Name and describe what it is. Give it to your child.
- While your child plays with the links, take two more of the links you just talked about and hook them together. Show your child what you have done. 'Look (child's name), I've linked the square and the circle together. I'm going to make a pattern.'
- Add a circle link to the square link. Tell your child what you have done and point out the pattern you are building: *square, circle, square*. Let your younger child play with the chain you are building for a few minutes and that point out how you are going to add the next link, a circle, to the pattern.
- For older babies, encourage them to hand you links to start a pattern. Point out what pattern they are creating and ask them to hand you the specific link you need next in their pattern.
- If they hand you a link out of pattern, that's okay. Tell them the name of the link in their hand and point out how it is different from the want you want. Then tap on the correct link you want.
- Hand them that link and ask them to help you put it on the chain. Praise their effort but be prepared to stop if they are tired or just want to play with the links their way!
- Start with a simple pattern of alternating two different links. This is a simple (AB, AB, AB) pattern. As your child develops, move to other pattern arrangements like (ABC, ABC, ABC) or (ABBA, ABBA, ABBA).
- Reinforce their skill of making patterns by using items around the house or pointing out patterns you see on their clothes, on their toys, in books, etc.

DID YOU KNOW?

- The brain is constantly searching for patterns. It organizes information by assessing patterns.
- Learning takes place as the brain examines new information and assesses how the information is like or different from what is already known.
- Very young children experience patterns through cause and effect. For example, shake a rattle and it makes a noise; swat a hanging toy and it swings; cry and someone picks them up.
- Provide a wide variety of developmentally appropriate experiences and rich conversation to help children to observe patterns in their environment.
- Provide opportunities for your child to see, copy, create and extend patterns using color, shapes, movements and sounds. This will later help them understand patterns in numbers.
- Observing and playing with patterns will also sharpens the skill of prediction.

SUGGESTED READING:

E Dale	Ten in the Bed
E Katz	The Babies on the Bus
E Christelow	Five Little Monkeys Jumping on the Bed
E Galdone	The Three Bears
E Knees	Knees and Toes
E Priddy	Hello Baby a High Contrast Book
E William	I Went Walking