

# Family Focus

Oct. 2018

Building a Foundation for School Success

## *Math at Home*

There are many opportunities for children to learn about math in their everyday routines at home. At home, children can practice counting objects, identifying shapes, make patterns, and sort objects.

**Counting and number sense** is the ability to make sense out of numbers. It includes recognizing and naming numbers, that each number has a quantity or amount, counting first in order and then backwards, and number operations such as adding and subtracting.

### Activities to Try

- ❖ **One-to-one correspondence:** Find 5-10 items to count. As you are counting them with your child, touch each one and say the number.
- ❖ **Counting:** Make a simple counting game using a disposable drink tray. Write numbers inside each of the sections and give your child items to count and place in the section. Touch each object and count out loud.
- ❖ **More than Less than:** To get your child ready for adding and subtracting later in his or her school years, count out two sets of objects. For example, there four blue cups and three red cups. Ask them questions like: *Are there more or less blue cups than red cups?*

### Counting Books to Check Out at the Library

- ❖ *One Duck Stuck* by Phyllis Root
- ❖ *Ten Black Dots* by Donald Crews
- ❖ *One Gorilla: A Counting Book* by Anthony Browne
- ❖ *Chicka, Chicka 123* by Bill Martin Jr. & John Archambault
- ❖ *Feast for Ten* by Cathryn Falwell
- ❖ *Ten Red Apples* by Pat Hutchin

**Shapes** can be found around the home both indoors and outdoors. In preschool, children can learn to identify and name circles, triangles, squares, rectangles, and ovals.

### Activities to Try

- ❖ **Make a shape:** Offer toothpicks, pipe cleaners, straws, or craft sticks as materials children can use to make into shapes. Discuss the shapes they make. How could you turn a triangle into a square?
- ❖ **Make 3D Shapes:** Children can explore how to form three-dimensional shapes. For example, let children watch as you cut rectangular containers such as cereal boxes. How many rectangles are there in the box? Then reassemble them.
- ❖ **Shape Hunt:** Give your child a shape to look for in a room in the house. For example, can you find squares in the kitchen? Count the number of shapes they find in the room with them.

### Shape Books to Check Out at the Library

- ❖ *Shapes in the Kitchen* by Tracey Steffora
- ❖ *A Star in My Orange: Looking for Natures Shapes* by Dana Meachen Rau
- ❖ *Round is a Tortilla: A Book of Shapes* by Roseanne Greenfield Thong
- ❖ *Shape* by Henry Arthur Pluckrose

**Understanding patterns** gives children an opportunity to see the relationships between items. The ability to recognize and create patterns helps children make predictions based on observations; which is an important skill in math. Understanding patterns will help children learn complex number concepts and mathematical operations.

### Activities to Try

- ❖ **AB Movement Patterns:** An AB pattern is when you do one thing such as clapping and then switch to another such as tapping your knees. Show your child this simple pattern- can they repeat it? Encourage them to make an AB pattern of their own. As they master this challenge them to add more movements in their pattern and have you repeat the pattern back to them.
- ❖ **Ice Cube Tray Patterns:** Collect objects that will fit in the ice cube tray sections such as pom-poms. Start a pattern in the top tray with the colors such as blue pom-pom, green pom-pom, blue pom-pom, green pom-pom, and then leave the next empty. Encourage your child to figure out what comes next in the pattern Encourage them to make a pattern of their own.

### Pattern Books to Check Out at the Library

- ❖ *People Patterns* by Nathan Olson
- ❖ *Lots and Lots of Zebra Stripes* by Stephen R. Swinburne
- ❖ *Teddy Bear Patterns* by Barbara Barbieri McGrath
- ❖ *Patterns at the Museum* by Tracey Steffora

**Sorting and classifying** items are basic concepts taught to children as part of preschool math curriculum. Recognizing that groups of objects are the same or different helps your child develop their logical thinking skills.

### Activities to Try

- ❖ **Sorting Socks:** Collect a variety of colored and sized socks from the people in your home. Separate the pairs and place them in a basket/box. Give them to your child to sort and match into pairs. Start small with five pairs and build up to more as your child is ready.
- ❖ **Sorting Seasonal Clothing:** Give your child clothing items from different seasons such as summer and winter. Have them sort the clothing by the season it goes with. Talk with your child about the differences in the seasons.
- ❖ **Sorting items by color:** Give your child a basket/box of random items. Have your child sort the items by color. Talk with your child about the color piles they sorted items into. To take the activity farther, count each of the items in the pile and talk about which has the most and the least.

### Sorting Books to Check Out at the Library

- ❖ *The Button Box* by Margarette S. Reid
- ❖ *Sorting* by Lynn Peppas
- ❖ *Sorting at the Market* by Tracey Steffora
- ❖ *Sort it Out!* by Barbara Mariconda

#### Online Resources for families:

[Education.com](https://www.education.com)

Suggested math activities

[Scholastic.com](https://www.scholastic.com)

This is an article discussing how to nurture a child's mathematical mind.

Resources used for this tip sheet: [NAEYC.org](https://www.naeyc.org)



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