



Getting Ready for School: Math



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.

Why is this important for school readiness?

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.

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.

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.

Sorting and classifying items are basic concepts taught to children as part of preschool math

Books to help with Math

curriculum. Recognizing that groups of objects are the same or different helps your child develop their logical thinking skills.

Counting

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

Shapes

- ❖ *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

Patterns

- ❖ *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

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

Activities to do with your preschooler:

❖ **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 out loud.

❖ **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. As you count back the items to see if they are right, touch each object and count out loud.



❖ **More Than or Less Than**

To get your child ready for adding and subtracting later in their school years, count two sets of objects. For example, 4 blue cups and 3 red cups. Ask them questions like *Are there more or less blue cups than red cups?*

❖ **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. *That's a triangle, how could you turn it 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? The ask children to figure out how to put them back together.

❖ **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? If your child is ready and able to count, count the number of shapes they find in the room with them.

❖ **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. For example, hop, jump, spin around and clap.

❖ **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—then leave the next empty. Encourage your child to figure out what comes next in the pattern (blue pom-pom, green pom-pom). Encourage them to make a pattern of their own.

❖ **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 5 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 further, count

each of the items in the pile and talk about which has the most and the least.



Resources used for this tip sheet:

[naeyc's Discovering Shapes and Space in Preschool](#)



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