

$2 + 3 + 4 = 9$

# Good Beginnings

Early Child Development · Parenting Education · Learning and School Readiness Tips

## the Buzz...

**W**hat do counting money, sorting clothes, and baking a cake have in common? They are all normal tasks that use basic math skills.

Letting your young children help you with these everyday tasks is helping them build their understanding of mathematics.

Math is all around us. When you cook dinner, shop for groceries, or go to the laundromat to wash clothes, you often use math. When your child stacks cooking pots, pours water in and out of cups, or counts his toys, he is using math, too.

Knowing how to count is basic to good math skills. But math is a lot more than learning numbers. Math concepts include understanding patterns and relationships among things. They include recognizing the shape, size, space, position, direction, and movement of objects and knowing such things can be measured.

Children learn these concepts best by doing—moving, touching, exploring, trying, and seeing. This issue of *Good Beginnings* offers you suggestions about activities to enjoy with young children that also teach basic math concepts.

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## Counting Can Be Fun

**M**any people think that early math for young children is knowing how to count to ten. Counting well is important, but number sense is more than just counting. It is understanding the different uses numbers have. Counting and becoming familiar with numbers will help your child understand other aspects of math. Here are some activities you can do to help your child improve her number sense.



- Count **real things** to help her use her own experiences with objects to better understand numbers. For example, let your child count out how many plates or napkins are needed when the family sits down to eat. Help her count without skipping numbers or counting something twice.
- Encourage your child to **sort objects** that are the same or different to help her learn that numbers are used to describe quantities and relationships. For example, at the laundromat let your child separate the clean socks from the other clothing. Let her match socks of the same color and size into pairs.

## Patterns and Relationships

**P**atterns are things that repeat. A necklace that alternates white and blue beads, for example, has a pattern. Relationships are the connections of things by some kind of reason, such as size or shape. Understanding patterns and relationships means understanding rhythm and repetition. It means understanding how to order things, such as from smallest to largest, sorting, and categorizing.

Patterns and relationships can be found in designs and pictures. They can be seen in everyday events, such as in the movement of the sun from east to west or in the days of the week or the

seasons of the year. Here are some hands-on activities encouraging children to recognize and create patterns.

- String two colors of beads or blocks or heavy cardboard shapes into a simple pattern. As children get older, they can imitate and create more complex patterns.
- Make a game out of arranging things in order from smallest to largest. Almost anything can be arranged in this way — pillows, pots, blocks, boxes, or books—even family members or playmates!
- Have your child group things, such as crayons, soup cans, or empty containers and cartons, according to their shapes or colors.

# Measuring

**B**eyond counting, numbers are important because they also stand for the length, width, weight, or amount of things. Measuring is an activity that can help your child learn this important concept. Here are some fun measurement activities to do with your child.

- Let him help measure the ingredients needed to make something to eat, such as cookies—2 cups of flour, 1/2 cup of sugar, 1 tablespoon of cinnamon, and so on.
- Let him help you measure the length of something, such as a room, a window, or a table, by holding a ruler or yard stick.

Remember that using inches, feet, and yards is just one way of measuring. For fun, use other units of measurement. "How many footsteps long is the kitchen?" "You are five cereal boxes tall!"

- Keep a regular record of your child's height. Do this every month or year. Young children enjoy seeing how big they are getting and predicting how big they will be the next time you measure.

## Books That Teach Math Concepts

**B**ooks, records, or tapes from your local library can help children learn math concepts. Look for stories or songs that rhyme, repeat, or have numbers in them. Here are some suggestions for math-related books you and your child can enjoy together.

- Mitsumasa Anno is a popular author of children's books that teach early math skills. These include *Anno's Counting Book*, *Anno's Math Games*, and *Anno's Mysterious Multiplying Jar*. *Anno's Counting House* (1982) is about ten little people who move from room to room in Anno's house. Anno gives instructions for many fun games that can be played with this book to teach a variety of math concepts.
- Eric Carle's *The Very Hungry Caterpillar* (1989) is a favorite about a tiny creature with a huge appetite. Your child will enjoy naming and counting the number of items the caterpillar eats until he turns into a beautiful butterfly.
- Margarette S. Reid's *The Button Box* (1995) tells the story about the fun a little boy has sorting the buttons of different sizes, shapes, and colors in grandma's button box.
- *Shapes* by John J. Reiss (1987) uses vivid colors to illustrate shapes of all sorts—from circles to octagons.
- *Counting Wildflowers* by Bruce McMillian (1986) shows lots of brightly colored, photographed flowers.

These are just a few of the stories your child could enjoy while strengthening counting and matching skills.

**He or She?** We take turns referring to children as he or she. When we use he or she, we mean to include all children.

**9** Newsletter editor: **Ellen Abell**, *Extension Family and Child Development Specialist*, Associate Professor, Human Development and Family Studies, Auburn University. Special thanks to the artist, Bruce Dupree, *Extension Communications Specialist*. Contributor: Kelly Dorr, Department of Human Development and Family Studies, Auburn University. [www.aces.edu](http://www.aces.edu)

References: [www.ed.gov/pubs/EarlyMath](http://www.ed.gov/pubs/EarlyMath) Early Childhood: *Where Learning Begins - Mathematics* - June 1999. By Carol Sue Fronboluti and Natalie Rinck (U.S. Dept. of Education, Office of Educational Research and Improvement).

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