

## A Family Note on **Finding the Math**

Young children begin to develop math concepts and skills very early in the first year of life. Family members play a special role in helping children learn about math. Throughout the day, as families talk, play, or carry out routines, children are learning. *Family Notes* show ways that families can use everyday experiences to help their young children learn math.

Some important things to consider:

- Math experiences should provide for fun, shared times between parents and their children. Children will build a positive attitude toward math learning and toward learning in general.
- Children need experiences handling and working with things. They need to look at, hold, count, stack, and explore the characteristics of things. While children are actively exploring, adults can “mathematize” their play. By introducing mathematical words and talking about the experience, parents help children understand the meaning of numbers, shapes, and other math concepts. For example, while children are playing with blocks, parents can describe blocks by using words such as **curved**, **straight**, **longer**, and **shorter**. Children hear new math vocabulary and deepen their understanding about characteristics of blocks at the same time.
- Children need repeated experiences. Just as children enjoy hearing the same books over and over, they need to handle materials and do things again and again. Over time, children need to practice these experiences again, so they recall what they have learned. In this way, they deepen their understanding and develop new concepts.
- Parent involvement in their children’s learning is extremely important. It especially helps children’s learning when parents use the language they speak best. When parents speak in their home language, they are more likely to have deep, meaningful conversations and use rich, descriptive words. This type of language helps children to deepen their understanding of ideas and concepts.
- Parents can observe their children’s interests and use those interests to build an understanding of math. For example, if a child goes to a slide in a park, adults can talk about position words like **behind** and **on top of** the slide. Children’s interest in the outdoors helps them learn about math!



Here are some ideas for helping children learn math during everyday home routines.

### Getting dressed



“**How many** buttons do you have on your shirt? Let’s count them as I button you up.”

*Number—counting*

“Here’s a sock for this foot. That’s **one** foot. Here’s a sock for the other foot. That’s **two** feet!”

*Number—counting, using one-to-one correspondence*

“Do you want to wear your **short** pants or your **long** pants?”

*Measurement—comparing sizes*

### Setting the table



“Will you help me? Each person gets one fork, one spoon, and one napkin.”

*Number—using one-to-one correspondence*

“**How many** spoons do we need? Let’s **count**.”

*Number—counting, solving problems*

“Give the **big** cup to daddy. I would like to have a **little** cup.”

*Measurement—comparing sizes*

### Eating a meal



“Your sandwich looks like a **square**. If I cut it this way (corner to corner), what shapes will it make?”

*Geometry—recognizing shapes*

“**How many** pieces of cheese do you want?” “Do you want **one** or **two**?” “Let’s count **how many** raisins you have.”

*Number—counting*

“You have **more** pieces of apple than I do.”

*Number—comparing number of objects*

## Picking up toys



"Let's put your cars **on** the shelf and the balls **in** the box."

*Spatial Sense—recognizing positions of objects*

"Can you put **three** trucks here?" "There should be **six** dinosaurs. Will you **count** them and make sure they are all there?"

*Number—counting*

"You can put away the **square** pieces. Your brother will put away the **round** ones."

*Geometry—recognizing shapes*



Here are some ideas for helping children learn math when at the grocery store.

### **Making the shopping list**



“**How many** apples do we need so each person in the family gets **one**?” Encourage your child to use fingers to show **how many** people in the family (and **how many** apples to buy).

*Number—counting, solving problems*

Involve your child in making **tally marks** or written numerals next to items on the list to indicate “**how many**.” Encourage your child to make a “pretend” list, too.

*Number—representing numbers*

### **Shopping at the store**



Point out the **numerals** (written numbers) that you see at the store, for example, “**2** for \$**1**” or aisle numbers. Encourage your children to find more **numerals** as you shop.

*Number—recognizing numerals*

**Count** apples, oranges, carrots, peppers, and other items with your child as you put them into bags or the shopping cart.

*Number—counting*

Talk with your child about **sizes** of items, such as cereal boxes or cartons of milk.

*Measurement—comparing sizes*

Look for **shapes** (e.g., circles, rectangles, or triangles) as you go through the store. Play a game with your child. Find a **shape**, such as the **rectangle** on the front of a cereal box, and then look for other items with the same **shape**.

*Geometry—recognizing shapes*

### **At the checkout counter**



“We should have **five** cans of soup. Let’s **count** and make sure.”

*Number—counting, solving problems*

Point out the **numerals** on the cash register display and talk about what they mean (shows how much each thing costs).

*Number—recognizing numerals*



Here are some ideas for helping children learn math when at the park.

### Going to the park



"There's a squirrel **on** the branch of the tree."

*Spatial Sense—recognizing positions of objects*

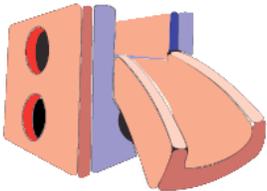
"Let's look for **numbers** as we go to the park. What **numbers** do you see?"

*Number—recognizing numerals*

"First we go past Tina's house. Next, we turn right at the corner by the library. The park is **close** to the library."

*Spatial Sense—learning about direction and location*

### On the play structure



Encourage your child to climb **on** play equipment, jump **off** a small step, walk **backwards**, or crawl **through** a tunnel.

*Spatial Sense—recognizing position and direction*

"Let's **count** the children on the swings. **One, two, three, four!**"

*Number—counting*

"The play structure has a **round** window. It looks like a **circle**. Do you see any other **circles**? Let's look around." "Let's make the same **shape** in the sand."

*Geometry—recognizing shapes*

### Having a snack



Ask your child to pass out the snack. "Will you pass out the snack? Each person gets a box of raisins."

*Number—using one-to-one correspondence*

**Count** the food items as they eat them. "I have **four** carrots. **How many** do you have?"

*Number—counting*

"What **shape** do you think the cracker is? It has four **straight sides**."

*Geometry—identifying shapes*