

## Counting with Money

Children are fascinated with coins.



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*Whenever you are waiting and have some extra time, pull out a handful of change from your purse or pocket.*

- ◇ Count the number of coins. Place a finger on each one as you say the number.
- ◇ Sort the coins and count how many pennies, nickels dimes and quarters.
- ◇ Count the amount of money explaining that 5 pennies is the same a 1 nickel.
- ◇ Play the game, "What's more?" First just use only nickels and pennies. Add dimes and quarters as children understand the equivalent amounts.
- ◇ Play, "What would have rather have, ...?" allowing your child to keep the coins if they understand the correct amount. "What would you rather have? A nickel and three pennies or a dime?" Ask them to count the entire amount they have earned before putting it in their banks.

## Counting Cotton Balls



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- Encourage your child to touch each cotton ball for one-to-one correspondence as they count to 5 for a 3-year old or to 20 for a 5- year old.
- Add or subtract by one or two cotton balls.
- Use a small kitchen tongs to fill a cup with cotton balls.
- Estimate how many cotton balls are in the cup or small container. Count to determine the exact number.
- Estimate how many cotton balls it would take to fill a larger cup. Count to determine how close you were to the estimate.



## Water Play in the Kitchen Sink or Bath Tub

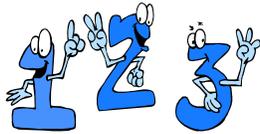
Include a set of nesting measuring cups.

- Stacking the cups teaches words such as larger, smaller, bigger, biggest and smallest.
- Pouring water from one cup to another allows a child to test which cup holds the most liquid.
- Pouring water teaches an older child that two half-cups of water fill one cup. Learning one fraction at a time is the easiest for a child to understand. Too many fractions can be confusing.



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## Button Sorting



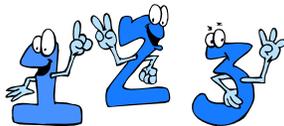
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Buttons are wonderful manipulatives for older preschoolers and young school-agers. Be sure to keep them out of reach of infants and toddlers who could choke on them. Collect buttons by snipping them from old garments or by hunting for them in grandma's collection. Add novelty buttons purchased at fabric shops or craft departments.

- Sort the buttons by size, color, material type, number of holes, or other criteria children choose.
- Encourage children to create games, patterns and designs.
- Use egg cartons and yogurt cups for sorting compartments.

Adapted with permission from the Child Care Information Center Newsletter, Issue 48 2004

## Count Everything!



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- ◇ Fingers and toes
- ◇ Plates on the table
- ◇ Pennies in a pocket
- ◇ Sides of the triangle
- ◇ Pushes on the swing
- ◇ Cracks in the sidewalk
- ◇ Steps upstairs or down
- ◇ Windows in the living room
- ◇ Wheels on the bike or fire truck
- ◇ How many nursery rhymes do you know?
  - One, Two, Buckle my Shoe

## *Rosie's Walk* by Pat Hutchins, 1992



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- ◇ Read the book.
- ◇ Role play Rosie's walk by taking a walk around the block
- ◇ Count your steps, the houses, dogs or people you see.
- ◇ Estimate the number of sidewalk blocks between driveways and count them.
- ◇ After your trip, sequence what you saw, the yellow house, the parking lot, the house with the basketball hoop, the railroad tracks, the apartment building.



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## Follow the Leader

*Inside or outside to learn directions*

Ask your child to follow you with a doll or truck as you lead and give directions.

- ◇ Under the table
- ◇ Over the chair
- ◇ Forward
- ◇ Backward
- ◇ Turn to the left
- ◇ To the right of the tree

When your child catches on, let them lead. Repeat the words in different situations.

## A Deck of Cards

- ◇ Count the hearts or diamonds on a card.
- ◇ Identify the numerals on the cards.
- ◇ Find all the 2's or 6's.
- ◇ Which number is more? Remember the game of war.
- ◇ Put the numbers in sequence: 1, 2, 3, 4.
- ◇ Add the numbers (or hearts or diamonds) on two cards.
- ◇ Set up word problems. Which number is more than 2, but less than 4?



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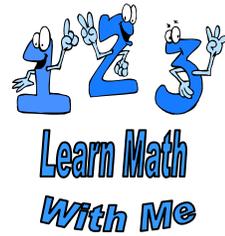
Tuck a deck of cards into your purse or glove compartment for a quick game while waiting for food or before picking up a passenger.



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## Laundry Day: Sorting Socks and Folding Washcloths

- ◇ Sort dirty laundry into light loads and dark loads.
- ◇ Determine piles for each family member. Show your child each clothing item to recognize and determine which pile it belongs.
- ◇ Sort clean socks matching size, color and pattern.
- ◇ Fold washcloths into halves and then quarters. Talk about other halves and quarters in their world: sandwiches, fruit, paper.



## Learning Math Every Day

Numbers, math concepts and math discussions are a part of our every day activities for people of all ages. Infants only a few weeks old can understand the difference between 2 or 3 items. Children eat 2 crackers, wear a pair of shoes, know their age, mark dates on a calendar, and count the plates on the table. Including counting and math words in your child's early years will set the stage for later interest and skills in math and science.

Counting is more than just repeating numbers. Several steps of learning are involved in the process:

1. **Understanding the one-to-one concept.** Each object should be labeled with only one number, so that no object is missed and the same object is not counted twice. *If counting two trucks, the red truck is labeled "1" and the blue truck is labeled "2." The red truck cannot be relabeled "3."* Children more accurately count items if they are able to touch the items as they count. Pointing to blocks, stickers, toys, and pictures in a book will be helpful. Count only 3, 5 or 10 objects until your child understands counting. Don't overwhelm them with numbers to 100!
2. **Same order every time!** The same sequence of numbers must be used to label objects each time they are counted. *If counting 4 blocks, the number sequence must be "1," "2," "3," "4," NOT "1," "4," "3," "2," or "1," "2," "5," "6."* That means repeating the same numbers frequently. Count steps as you climb them, the candles on the cake, and the number of times you clap. However, just repeating the numbers does not mean children understand the one-to-one concept.
3. **The last number is the quantity!** The number that is said last represents the number of objects that have been counted. *When counting out plates for lunch, you have 10 plates when you end with the number "10."*

Family play and activities to teach additional math skills:

- Sort socks to learn patterns and pairs.
- Talk about sizes: big, little, small, gigantic, medium, smaller, smallest by comparing cereal bowls, people, blocks, cookies.
- Sort collections according to size, shape and color. Some ideas include seashells, rocks, clothespins, dolls and stuffed animals, bandages, nuts.
- When waiting for an appointment, use the coins in your pocket to explain the value of nickels, pennies and dimes.
- Share an apple or orange with 2 or more people.
- When selecting clothes to wear describe the pattern names: checked, stripes, polka dots and plaids.
- What's a dozen? Use buttons or paper clips, shoes or gloves.