What are the number and operation skills of a young child?

The concept of number is critical in ordering, labeling, and expressing quantities and relationships. Number sense is much more than counting, but counting and becoming familiar with numbers will help children understand other aspects of mathematics. Through exploring their world and experiencing mathematics through their play, children begin to think and work with numbers and to understand their uses and relationships. Children develop the ability to count accurately and competently. They begin to continue counting or count on from a specific number as well as to count backwards. They see relationships between numbers, and begin to take a specific number apart and put it back together again (part/part/whole relationships). Number sense for a young child is about counting, adding, and subtracting to solve problems in meaningful contexts. Children will develop skills in ways that makes sense to them. Children can begin to use language to describe how they use numbers and begin to see connections to mathematical symbolic representation through the print in literature, in games, and in their environment.

For more information about theories behind developing number sense for young children, see Children's Thinking about Beginning Number Concepts and the Teacher's Role from TEXTEAMS Mathematics Institute Pre-Kindergarten/Kindergarten.

From the Texas Prekindergarten Curriculum Guidelines

The child:

- Arranges sets of concrete objects in one-to-one correspondence.
- Counts by ones to 10 or higher.
- Counts concrete objects to five or higher.
- Begins to compare the numbers of concrete objects using language (e.g., "same" or "equal," "one more," "more than," or "less than").
- Begins to name "how many" in a group of up to three (or more) objects without counting (e.g., recognizing two or three crayons in a box).
- Recognizes and describes the concept of zero (meaning there are none).
- Begins to demonstrate part of and whole with real objects (e.g., an orange).
- Begins to identify first and last in a series.
• Combines, separates, and names "how many" concrete objects.

Mathematics Instruction in Action: Number and Operations

The following are sample activities with ongoing observation tips for number and operation. It is vital that mathematical content and teaching methods for young children be child-centered and developmentally appropriate. That is, the children's thoughts, words, actions, interests, and needs are the basis for instructional activities. Young children need opportunities to explore their world and experience mathematics through their play. While children need always to be at the center directing their mathematics development, the following contains examples of child-tested instructional activities suitable for home, preschool, Prekindergarten classrooms, and other informal learning environments. Some of these examples may seem more appropriate for individual, small-group, or large-group interactions but most can be adjusted to meet a variety of settings.

Activity for number and operation:

Students take a set of small plastic fruit. They separate the kinds of fruit into muffin tins and count how many are in each one.

Questions to ask:

An example of a question to begin conversation:

• Tell me about your fruit.

Examples of questions to probe further with:

• What kinds of fruit do you have?
• How many bananas do you have? How did you figure this out?
• Do you have fewer bananas or apples? How do you know?
• Do you have more strawberries or oranges? How do you know?
• How many carrots do you have? (Notice that carrots are not fruit, so zero or none would be a response to listen for.)
• If you put your bananas and apples together, how many do you have?

Examples of what to listen and look for:

(NOTE: This is not meant as checklist of expected skills to be mastered by students. There are no right or wrong answers. The intent for the questions and what to look and listen for is to provide adults with some guidance to help them observe children's mathematical thinking.) What to listen for:

• Does the child know the counting sequence? How far does he/she count correctly? Does he/she imitate counting by saying numbers not necessarily in the correct order?
• Does the child name "how many" without counting?
• Does the child compare the numbers of concrete objects using appropriate, informal language?
• Is the child confident when counting?

What to look for:

• Is the child able to sort the rubber fruit?
• Is the child matching one counting word with each object (one-to-one correspondence) when counting?
• Can the child count concrete objects to five or higher?
• Does the child recognize the concept of zero?
• Does the child combine, separate, and name "how many" concrete objects?
• What happens if the child looses count? Does the child start over? Does the child continue counting?
• Does the child self-monitor and self-correct?
• What strategy does the child use to keep track of object she has counted and objects that still need to be counted?
- Does the child realize that the last number spoken in the counting sequence is the number of objects in the group? If after the child has counted, if you ask "How many are there?", does the child start to recount the objects or does the child recognize that the last number recited is the number of objects in the group?
- Does the child understand conservation of size? That is, if you spread out the objects, does that child realize that this did not change the number of objects in the group?
- How does the child compare the numbers of concrete objects? Does she line them up and use 1-1 correspondence (that is match one object with one object)?
- Can the child determine which group has more?
- Can the child determine which group has less?
- Can the child determine if two groups have the same number of objects?

**Activity for number and operations:**

**Snack time**

Make snack self-serve and ask children to count out their own. In a classroom, create snack centers for three or four children. Place labels with pictures and directions such as "You may have 4 crackers." **Questions to ask:**

**An example of a question to begin conversation:**

- How many crackers should you take today? How do you know?

**Probe further with:**

- How many crackers have you taken so far?
- How many more crackers should you take?

**Listen for:**

- Does the child know the counting sequence?
- Do the children help one another?
- Does the child name “how many” without counting?

**What to look for:**

- How does the child serve herself/himself?
- Does child use 1-1 correspondence (that is match one cracker with one picture)?
- Does the child deal with a handful instead of counting one at a time?
- Does the child count objects into a pile or use a strategy to keep track of what has been counted and what hasn’t?
- Does the child recognize the number or use the pictures as clue to how many snacks should be taken?
- Is the child self-monitoring?
- Can the child count concrete objects to five or higher?
- Does the child combine, separate, and name “how many” concrete objects?
- What strategy does the child use to arrive at the number of crackers he/she takes?

**Activity for number and operations:**

**Snack Time: Concept of Zero**

Transform snack time by making it into a free-choice center. Place labels containing rebus symbols and print in the center to let children know how many of each snack item they may choose. Label a particularly attractive snack (such as Oreo cookies) with zero. (Stay close by to watch the reactions!) Of course, the children will put up an immediate outcry as they come to realize what zero means. Wait until you have a fairly large concerned group and don’t give in until you have had a very lively discussion about the concept of zero.
Questions to ask:

An example of a question to begin conversation:

- How many Oreos do you get to take today? How do you know? What does “zero” mean?

Probe further with:

- How would the sign need to be different if you wanted to get some Oreo’s?
- Do you think you could make a better sign? What will you put on it?
- Is there a different snack item that we could put this zero on?
- What if we put the zero up tomorrow instead of today? (If children agree to this, be sure to follow up the next day with another equally or more--attractive snack and another zero!)

Listen for:

- Can the child explain the problem to another child?
- Does the child offer a solution to the problem?

What to look for:

- Does the child place an Oreo¨ on her snack napkin?
- Does the child seem perplexed when confronted with the thought of zero cookies?
- Does the child agree to place the zero on a different snack? The next day? Why or why not?

Activity for Number and Operations

Encourage drama, play, and stories telling for children to explore counting, addition, and subtraction. The Prekindergarten Guidelines suggest that young children be given opportunities to act out and tell stories involving part/part/whole relationships. This can be done with story boards or circle time dramas. The following sample of a whole class activity is from Dr. Nita Copley.

Math All Day: Centers and other Times

The mathematical content that is described in the Prekindergarten Curriculum Guidelines is integrally tied to the ways the classroom is structured and the types of experiences children encounter. Young children need opportunities to explore their world and experience mathematics through their play. Most mathematics learning in the early years does not require sitting down for group lessons. However, although learning is often informal, it is intentional and deliberate. Careful planning is required to build upon and extend the informal knowledge of the child. In Preschool and Prekindergarten classrooms, management techniques and room arrangements are of utmost importance. SEE books by Jean Feltman (For example, A Survival Guide for the Preschool Teacher) for classroom management ideas.

Well-placed discovery centers provide hands-on learning experiences that can engage children in mathematical thinking. All centers should all be equipped with writing tools so children can represent their mathematical thinking. You may rotate if you do not have room for all of the following centers in your classroom all year. Suggested centers include:

- An Arts and Crafts Center with plenty of markers, crayons, stamps, glues, watercolors, buttons, shells, clay, and other items for exploring, representing, and communicating. The materials should be easily accessible in sorted containers that the children are responsible for maintaining.
- A Manipulative Center with pegs and peg boards, interlocking blocks, beads, puzzles, and other items to sort, match, pattern, count, put together, and take apart.
• **A Sensory Table** filled with sand, rice, beans, leaves, water, ice, or other items. Include a variety of containers for pouring and measuring or small toys and other items for exploring other mathematical ideas such as patterning.

• **A Block Area** with blocks of various sizes and shapes for constructing and exploring.

• **A Dramatic Play Center** with number rich props such as an imaginary class phone directory, old phone books, play money, price tags, cash registers, bathroom scale, scales to weigh plastic fruit and vegetables, measuring cups and other items to recreate settings children experience in their lives.

• **A Literacy Center** with a chalkboard, felt-board, listening center, puppets and stage, and word display (that includes alphabet and numerals) for exploring and communicating mathematical ideas.

• **A Construction Center** with non-retracting measuring tools, empty boxes, straws, PVC, pulleys, hardhats, safety goggles, large nuts and bolts, aluminum foil, clay twine, blocks with holes, brads, dowel rods, paint stir sticks and other items to explore structures, measurement, spatial reasoning, and other mathematical ideas.

• **A Music and Creative Movement Center** that has a large open area with a tape player, various musical instruments (store bought and child created), story props, scarves, streamers, pompoms and a wide variety of tapes with a wide variety of music styles for developing patterning, one-to-one correspondence, number sense, and communication skills.

### Number and Operations at the Art and Crafts Center:

• Encourage the children to talk about their drawings and art work. You can find out a lot about a child's thinking by examining his/her artwork and listening to explanations. (We need to link to the artwork here!)

**Mystery Number Creation**

You will need a Styrofoam® base for each child, a variety of collage material such as feathers, pipe cleaners, tongue depressors, pastas, glue, jewels, etc. and a number cube. The child rolls the number cube. Whatever number the child rolls, he/she will create a creation using that number consistently to make their creation. For instance, if the child rolls a 5 then the child may use five pipe cleaners, five feathers, five pastas, five tongue depressors to make a creation. After the children have made their own mystery number creation, they display them around the room so that the other children can figure out the mystery number. **Art Frames**

Provide glue, a variety of art papers, and a large selection of colored paper cut into 1-inch squares at the art center. As students create their artwork using the different papers, suggest that they might like to make a frame by gluing the 1-inch paper squares side by side around the edges of their artwork. Talk about how many squares are on each side of the paper. Does larger paper need more squares? Count the squares on the edges of rectangular paper and compare. Count the squares on the edges of square paper.

### Number and Operations at the Block Center:

**How many blocks?**

Who can make the tallest tower? Encourage the children to keep track of the number of blocks they have in their tower, as they are building and how many blocks are in the tower when it falls. Encourage them to try to make in towers with even more blocks. Take a picture of tall towers and the builders before the towers fall. Encourage the children to draw a picture of a tall tower or use other ways (such as putting together unifix cubes) in order to remember how many blocks were in the tower. (multiple representation)

**Building Pens**

The children are encouraged to make pens using the legos provided for them. For example, the blue Lego pen may have 5 legos in it. The red Lego pen may have 4 Legos in it, etc. They count how many Legos are put in each pen built. Before it is time to put the Legos away the
children are encouraged to draw the pens on a large sheet of butcher paper to record the activity they have completed for the day.

Skyscrapers

For this activity you will need a ten frame mat for each player, one number cube, and several Unifix® cubes. The first player rolls the number cube and makes a tower with that many Unifix® cubes and places it in the first space of the ten frame. The other players repeat the same procedure taking turns until each child has covered all their spaces on the ten frame. The children then talk about their city of skyscrapers. How many towers have the same amount of unifix cubes? Which is the tallest tower? the shortest tower? After their discussion, the children then connect all their towers to make one continuous tower. The players place the towers together and have another group discussion with questions. Whose tower is the tallest? Shortest? By how many? Extension: To crown a winner, a child spins a tallest/shortest spinner. This way the children do not make a permanent connection that the tallest/ biggest/largest is always means the winner. Number and Operations at the Sensory Table:

Pom Pom Toss

Ask the children to toss (say 5) pom poms into a cup. Ask "How many did you get into the cup?" "How many did not land in the cup?" If they had fewer land not in the cup "They win!"

Even or Odd

For this activity you will need an ice cube tray for each player and a set of manipulatives. (Use a manipulative that the child cannot grab more than 12 in a handful.) Play in partners. The child places his/her ice cube tray vertical. The child then grabs a handful of manipulatives and places one manipulative in one slot filling the slot starting from the bottom and going across. The child discusses with his/her partner whether he/she grabbed an odd (one manipulative did not have a partner) or even (every manipulative had a partner) number of manipulatives. Repeat. Ask questions such as: How many did you grab in your handful? How can we make sure? Did you grab an even or number of ______? How do you know?

Stamp Pad

Provide number cubes, stamp pads, and index cards. Take advantage of children's natural affinity for stamping by introducing them to the "Stamp Pad Game." Children roll the number cube. They then get to put that many stamps on their index card. Children can compare cards and discuss who got to make more stamps, less stamps. This can be played in small group, pairs, or individually. Students who work with the activity individually can stack all of the like index cards together and talk about how many cards have one stamp, how many have three stamps, etc.

Number and Operations at Snack center:

Make snack time a station. Children can gather their own snacks. In the beginning, place a picture sentence accompanied by words to show the children the amounts they should take, but later in the year remove the pictures and have the children work from numerals and words.

The Goldfish and Raisin Scoops

A large bowl of goldfish is placed on the table and a large bowl of raisins with a small scoop in each bowl. Paper plates are available for the children to place their snacks on. A rebus is there to let the children know how many scoops of goldfish and raisins to place on their paper plates. Also, a sentence strip that states, "You may have one small scoop of goldfish and one small scoop of raisins." The children count how many goldfish they scooped and how many raisins they scooped. Later in the school year change the size of the scoop so the children learn to count higher as the year progresses. Also, remove the rebus so the children count without it.

Number and Operations at Music and Creative Movement:
Five Green and Speckled Frogs

In the music center, provide a taped version of the song "Five Green and Speckled Frogs" along with froggy headbands for five children. Allow students to line up five large blocks, small chairs, or other classroom materials to be the log. As the music plays, the children sing along and hop into the pond. If necessary, help them decide which frog should jump first, second, last, etc. Have them count to see how many are in the pond and how many are still on the log. Watch to see if they can regulate themselves so that only one frog jumps on each verse and to see if the number of frogs still on the log matches the verse of the song. Also discuss why there cannot be only three frogs or six frogs: they must have five frogs to play this game! If one child cannot quite seem to catch on to when to jump, do the other students prompt him or her? Are there one or two students who seem to have the concept firmly in hand and direct the play? Substitute any action rhyme with appropriate props to meet the theme, holiday, or unit of study throughout the year. It really helps to have the song on a CD set to repeat the track or to have one specially prepared tape which plays the song over and over and over.

Octopi and Spiders

There are several songs that involve spiders and octopuses. This activity requires no props but it does take a lot of wide open space for doing spider dances and octopus dances. Talk about the fact that spiders and octopuses have eight legs. How many arms and legs does one child have? How about two children? How many spider (octopus) legs would two children together have? Children find a spider partner (or an octopus partner) and stand back-to-back linking elbows or front-to-back with the taller child behind. If you have enough open space for it to be safe, you may tie the two partners together around the waist with a piece of yarn. Children dance together to the spider and octopus music (Raffi has a good Octopus song, and you can always do Eensy Weensy Spider!) If you desire, make spider-eye Headbands, remember that each spider has eight eyes!

Number and Operations in the Literacy Center:

How Many is Your Name?

Using Unifix cubes, write each child's name, placing one letter on each cube. Cubes can be stored in baggies labeled with the child's name on the outside. As students put the cubes into the proper order to spell their names, have them compare. Does your name have more cubes than mine? How many cubes are in my name? How many are in yours? How many letters are in my name? How many are in yours? Who has a long name? Who has a short one? As a variation, you can place the letters on the cubes so the stick of cubes reads correctly from top to bottom. When the letters are placed top to bottom, children can explore making their name by placing the Unifix cubes on their fingertips in the proper order. Does your name take all five fingers? More than five? How many fingers does Christopher need? What can TayAundraneekeka do? How many fingers does Asa have left over?

Number Word Match Make cards for peg-board, felt board, magnetic board, etc. and place in your literacy center. One set of cards should have sets through 10 represented with sticky dots or other means. One set of cards should have sets through 10 represented with numerals; a third set should have sets through 10 represented with words. A final set should have sets through 10 represented with words, symbols, and numerals all three. There should be 4 sets of 11 cards (don’t forget to include your zeros!) Students match dot cards with numeral cards and word cards. The cards with all three representations is the child’s self-correcting set. This is an excellent activity for the student who is eager to explore all he or she can find and who likes a challenge! They will soon be reading the number words.

Number and Operations at the Discovery Center:

Drop pennies in a condiment cup taped at the bottom of a clear container. How many landed in the cup? How many landed out of the cup? How many pennies were there altogether? Replicate the set-up but this time in put water in one of the containers. (Hint: use duct tape to fasten the condiment cup.) How many landed in the cup? How many landed out of the cup? How many pennies were there altogether? How does the water affect the penny drop? Is it easier or harder to get the pennies into the cup in the container with water? You may wish to
repeat many times, record and keep a record of the number of times 0, 1, 2, 3, 4, or 5 pennies were in cups to compare.

Is a ladybug an insect? How many legs does it have? Use a magnifying glass to check this out.

**Walking Tours for Number and Operations:**

*How Many Doors and Windows?* The children take a walking tour to the school office from their classroom or anywhere in the school. The children are given diecuts of doors and windows. The teacher has large bag to put the door and window die-cuts in as the children count how many doors and windows they see on their walk to the office. Upon return to the classroom empty the doors and window die-cuts out of the bag and count them together how many doors and windows were seen on their walk.

**Teacher Tips to develop Number Skills:**

Teachers share ideas for growing young children's mathematical thinking here. How do you instruct?

- I look and listen to find out what my children know and are able to do. I have a multi-age group of children (ages 3-5). I observe them using number and operation ideas in many settings throughout the day, even without me actually posing problems for them. Many times they make up their own problems. Here are some things I have observed in the art center: Children compare their sets of supplies and come asking "How come she gets more than me?" I ask "How do you know she has more?" The child replies " She has 5 and I only have 2!" Children use numbers to describe their drawings. For example, "My buffalo has 10 legs and yours has 6 legs." Math is catchy. My children follow one another's lead. Once when we were decorating a small poster, some of the children cut out small squares and pasted them around the outside edge of the poster. Then they counted the small squares. Some of the children wrote numerals on the small squares as they counted. They compared their totals with one another when they were done. (Communication)
- We use finger-plays and songs to learn about one more, one less, zero, and the counting sequence. (Connections)
- In addition to rote counting and numeral identification, I believe it is important to move onto making sets of different quantities and connecting those sets to numerals. My goal is to show my children a set of 5, then secretly hide 3 so that they can only see 2. I want them to be able to answer "How many did I hide?" I use many different types of activities and materials (such as ten-frames, number cubes, dominoes, etc.) to help them build mental images of numbers.

The following is a description of an activity that I have found to be very effective in building this number knowledge:

- Give each child three pennies, some shiny and some not shiny. They use one-to-one correspondence and "moving and counting" to determine that they each have 3 pennies. They separate their pennies into two sets: shiny and not shiny. (Some children have 0 shiny, 3 not shiny; some have 1 shiny, 2 not shiny; some have 2 shiny, 1 not shiny; and some have 3 shiny, 0 not shiny). We do a lot of "talking" about their sets, e.g. "I have 1 shiny penny and 2 not shiny pennies." (COMMUNICATION)
- The children then "represent" each of their shiny pennies with a yellow link and each of their non-shiny pennies with a red link and make a chain of their three links to represent their three pennies. They describe the chains with the same language that they used to describe their sets of pennies, e.g. this person has 1 shiny penny and 2 not-shiny pennies." (I also uses some hand signals for the numbers.) (MULTIPLE REPRESENTATIONS and CONNECTIONS)
- Then the children learn a game where someone holds some of the three pennies in one closed hand and the rest of the pennies in an open hand. The students use the chains to help them guess what is hidden in the closed hand. For example, "I can see two pennies in this hand. So there must be 1 penny in the other hand (because that is like the chain with two yellow and one red." The children think it is like doing a magic
trick to be able to answer this question and they go home and do it with their parents
and brothers and sisters. (PROBLEM SOLVING)
  ● More Connections: They turn the chains "sideways" and talk about rotations. They
talk about how 1 and 2 in a chain is like the reflection of 2 and 1 in a chain.

- I put up a whole year's calendar at one time, with pictures on special days, such as birthday
  cakes on birthdays. The children do lots of number work, exploring questions such as,
  ● How many birthdays are there this month?
  ● Which month has the most birthdays?
  ● How many days are there until a special day such as a birthday, field trip, or buddy
day?
  ● How many days are in a week?
  ● How many Tuesdays are there this month?
  ● How many Tuesdays were there last month?
  ● Which month had more Tuesdays?

**How do you use technology and make connections with it?**

- We use a stamping program from Kids Works which allows the children to select an icon and
  stamp it on the screen with a key stroke. The children use this stamping feature to make their
  own set of number cards to take home and show their parents. Because it is not a program that
  checks their answers, it is a good assessment device for the teacher, to see if they have made
  their number cards correctly. They can make many number cards for the same number with
different patterns, different combinations of stamps, etc. My children make similar cards during
Art Time, gluing real objects on a card.

  My children make sets of certain numbers with manipulatives.

  The whole group comes together and the teacher asks questions about how what they did at
the art center or math center was like the cards they made at the computer.

  "They get so excited about making the number cards with the computer. When they get excited
about something at one center, then it goes through what they do at all the other centers."

This technology application is so exciting and popular because the STUDENT is in control of
the situation. It is very different from a tutorial program, where the software is controlling the
student.

**How do you connect math with real world settings?**

- I incorporate quite a bit of number work into taking attendance each day. I have a poster with
the names (and pictures, if possible) of girls down one side and boys down the other. Then
each child has a clothespin with name and picture to match to the poster.

  At the beginning of the year, I sort the class into two groups to help them manage finding their
stuff all through the year. We have the blues and the greens.

  I regularly ask: Are there more greens here today or blues? How do you know? (REASONING)
First, the children sort themselves into blues and greens. They talk about whether it seems like
there are more blues here today or more greens here today. (NOTE: They have a lot of trouble
identifying which set is "less." Perhaps this is a result of us avoiding it in everyday language.
We don't have to choose between "fewer" and "less" and it just sounds more comfortable to talk
about which one is more. So maybe young children don't hear "less" as much as they here
"more.") They line up, shake hands, or count themselves to answer questions about how many
greens are here and how many blues are present.

Then, they pin their clothespins in the appropriate places on the poster, and talk about the
same questions. They begin to notice that their answers to the questions are the same whether
they are talking about the sets of themselves or the sets of the clothespins (MULTIPLE
REPRESENTATIONS). On the poster, they can also see how many are NOT here (advantage
of a different representation).
We continue this number work with lunch count. The children always have 3 choices, so they sort themselves into three groups, based on their lunch choice. They compare the number of people in each group by lining up in a “people” graph. They talk about which group has the most. Then they mark their choices on a pictograph. (We could possibly use clothespins for this activity also, since some children forget their choices after we made the marks on the pictograph.) Then we record the numeral telling how many in each group to send to the office. (MULTIPLE REPRESENTATIONS) Sometimes, the total of lunch count doesn't match the total of attendance. If I have time I ask, “Should the numbers match? What do we need to do?” (REASONING and PROBLEM SOLVING)

- I ask a pair of students to be “The Counters of the Day”. The children could help with the lunch count. “The Counters of the Day” would pass out one color coded unifix® cube to each child depending on their lunch choice then collect all of the cubes, sort them, and snap together a unifix® cube tower for each. We discuss the heights of the towers, count how many in each tower, and compare them. We also join the towers and count how many unifix cubes in total we have and compare it to today’s total attendance. “The Counters of the Day” count may other things such as number of pockets, number of eyes, and many other items (too many to list).

**How do you assess children's thinking and encourage communication?**

- I ask many “how many” questions and listen. I either accept the child's explanations or ask another question if the explanation doesn't seem match my intended question. For example, three year-old Chase had made a beautiful paint stamp picture. I admired his picture and noted it had many beautiful insects on it. He described the insects as ladybugs and butterflies. I asked how many butterflies were in his picture. He counted pointing his finger, one, two, É, seven correctly. I asked how many ladybugs were in his picture. Without counting but looking for a second, he answered four, correctly. I was impressed by both accomplishments. I had expected him only to imitate counting by reciting numbers not necessarily in sequence but he displayed one-to-one correspondence, counted items in a collection of seven (these were not concrete items that he could push aside to track), and recognized “how many” in a group of four without counting. I decided to push further. I asked, “Are there more ladybugs or butterflies?” He answered, “I can't.” I was baffled by this response so I asked, “What do you mean?” He explained that he had finished the picture and it was dry. The art center had been put away, so it was impossible for him to make more stamps on his picture now. Maybe some other time he could make another with more for me. My response was "That would be wonderful." I decided to wait for another opportunity to listen for his understanding of more than, less than, and same as.

**Book Corner**

Here are just of few examples of books with number and operation ideas.


Berenstain, Stanley, and Janice Berenstain. *Bears on Wheels.* Random House.

Carle, Eric. *1,2,3 to the Zoo.* Philomel Books.


Dee, Ruby. *Two Ways to Count to Ten.* Holt.


Hudson, Cheryl. *Afro-Bets 123 Book.* Just us Productions.


Inkpen, Mike. *One at Bedtime.* Little, Brown, & Co.

Jones, Carol. *This Old Man.* Houghton Mifflin Company.

Keats, Ezra Jack. *Over in the Meadow.* Scholastic.

Kellog, Steven. *The Three Little Pigs.* Marrow/Avon.


Marley, Deborah. *Animals One to Ten.* Raintree.


Mathews, Louise. *Bunches and Bunches of Bunnies.* Scholastic.

Mathews, Louise. *Cluck One.* Dodd, Mead &Co.


Medearis, Angela S. *Picking Peas for a Penny*. State House Press.

Pallotta, Jerry. *Cuenta los insectos (The Icky Bug Counting Book)*.

