

## Dear Teachers,

The following pages have been designed with you in mind. Flip through this book to find exciting, hands-on ideas for introducing and reinforcing counting and sorting skills with a pocket chart! (LER 2206)

Pocket Chart Math – Counting and Sorting has been developed to provide creative teaching ideas and reproducible activities to support the use of a pocket chart. Suggested activities are designed to attract all types of learners. They encourage listening, speaking, observing and manipulating number, word, and picture cards to teach children how to count, sort, group, and much more. In addition, this book contains 142 ready-to-use cards to aid you as you teach counting and sorting. The cards display illustrated pictures and/or words to use within each lesson, and are color-coded for handy organization. A Cards-At-A-Glance chart shows what is pictured on each card, and is located in the back of the book for easy reference. Also included is a Reading List to help you build a classroom library filled with children's literature about counting and sorting.

This book quickly becomes a compact storage file! Tear out the sheets of cards along the perforated lines. Laminate the cards for extra durability, cut them, and store them in the pocket provided on the back cover of the book. As you use them, tear out the blackline master pages for photocopying, then use the folder pocket on the inside front cover for storage.

# Pocket Chart Math

## Counting and Sorting

### Introduction Strategies:

1. Practice sorting real stuff! Students will be surprised at how many things they sort every day without even realizing it when you do a hands-on sorting activity. Fill a bag with an array of items that share common qualities. For example, you could place a pen, pencil, crayon, and marker in a bag, along with a banana, a box of raisins, a granola bar, and a package of pretzels. Tell students that the items in your bag fall into one











of two categories: Things We Use to Write and

Things We Eat. Have students pull the items out of the bag, one at a time, and decide in which category each item belongs.

2. Ask students to think about the different types of stores they shop in (hardware stores, discount stores, grocery stores, clothing stores, sporting goods stores, etc.). Use the grocery store as an example to start a discussion about the usefulness of sorting things. Ask students the following questions: "How is the grocery store organized? Are the apples next to the meats or the paper towels? What would happen if the items in stores weren't sorted into groups?" You could even take a field trip to a local supermarket to see how the wares are organized and grouped.
3. Talk about the characteristics that make students unique (and the ones that many students share) as a precursor to the first lesson. For example, you could informally survey students (or count them) to see who: wears glasses, is left-handed, rides the bus, has curly hair, owns a pet, is an only child, speaks more than one language, likes to eat vegetables, has freckles, wears a watch, etc.
4. Surround your students with numerals to inspire counting and familiarize them with the shape and look of the numbers. Posters, bulletin boards, and number-lines may be helpful ways to do this. Encourage them to count items in their environment (bus stops, lockers, classroom windows, students in the lunch line, etc.).
5. Assess each child's fluency in counting and number identification before beginning your counting lessons, so you can tailor the activities to each child's ability level. Remember that the lessons and activities in this book can be scaled up and down in difficulty level, and be repeated as a review to accommodate students who learn at a slower pace.

# Teaching Notes: Sorting People

Cards needed: (red ☀ )

|   |   |   |   |   |         |         |         |
|---|---|---|---|---|---------|---------|---------|
|  |  |  |  |  | old     | without | young   |
|   |   |   |   |   | a hat   | glasses | with    |
|   |   |   |   |   | a beard | blonde  | hair    |
|  |  |  |  |  | boys    | girls   | brown   |
|   |   |   |   |   | black   | spots   | stripes |
|   |   |   |   |   | people  | with    |         |

## Presenting the concept:

Invite your students to look around the class and pay attention to their classmates. Explain that things like the color of our hair or eyes, our gender, the shape of our faces, and whether or not we wear glasses, hats, or braces on our teeth can be used to sort people into groups. To demonstrate your point, do a simple sorting activity by separating the girls and boys into two separate groups. Then place the ten people cards in the pocket chart, and ask a student to separate the boy and girl cards by placing the boy cards on one side of the chart, and the girl cards on the other side (just like you just did with your real students in class). Ask students to look carefully at the people on the cards and brainstorm ways to sort them into groups according to the way the people look.

## Extending the activity:

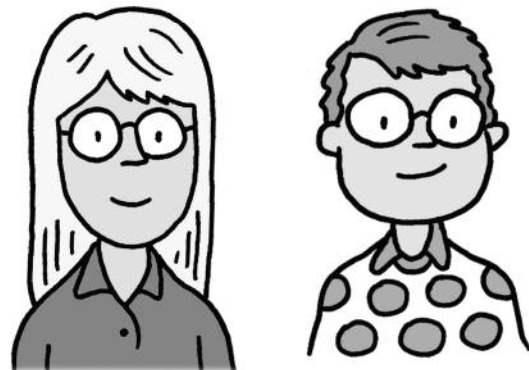
Place one or more word cards in the top of the pocket chart and read the cards aloud (see the list below for word card combination ideas). Place the people cards on a table or flat surface near the pocket chart. Ask students to look at the people cards, select the ones that match the word cards you placed in the pocket chart, and place the appropriate people cards in the chart under the corresponding word cards. Start by placing the *boys* and *girls* cards at the top of the chart, and asking a student to place all of the boys under the *boys* card, and all of the girls under the *girls* card. Recommended combinations of word cards follow:

### Groupings all cards will fit into:

boys – girls  
old – young

### Groupings some cards will fit into:

people with/without glasses  
people with/without a hat  
people with/without a beard  
people with brown/blonde/black hair  
people with stripes/spots



## Note to teachers:

Because many of your students are probably non-readers, you may need to assist them with activities such as the People Sort activity on page 3. Read each characteristic clue aloud, and ask students to circle the pictures of the people who have that characteristic.

Name \_\_\_\_\_

## Activity 1

# People Sort

Directions: Circle the pictures of the people who have the physical features listed down the side of the page.

wear glasses



boys



have a beard



have long hair



girls



wear stripes



wear spots

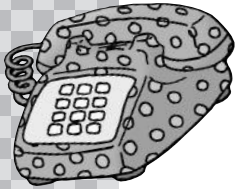


wear solids



# Teaching Notes: Sorting Things

Cards needed: (orange ☀)



|         |         |            |        |        |         |  |  |  |
|---------|---------|------------|--------|--------|---------|--|--|--|
|         |         |            |        |        |         |  |  |  |
|         |         |            |        |        |         |  |  |  |
| without | with    | live in    | land   | water  | spots   |  |  |  |
| stripes | animals | non-living | things | living | live on |  |  |  |

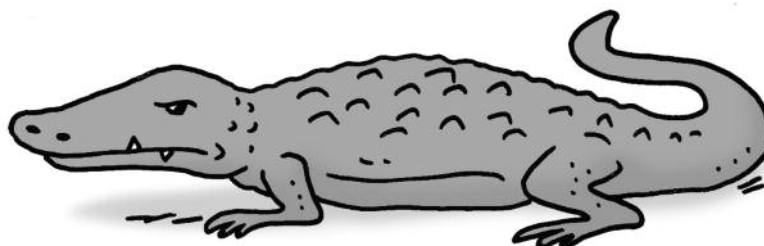
## Presenting the concept:

Review some of the ways you sorted the people cards (according to hair color, age, gender, clothing, etc.) to remind children of some sorting strategies. Discuss the fact that even very different types of items (animals, clothing, and vehicles) share some similar characteristics, and can be grouped accordingly. For example, in a group of unlike items such as a rabbit, a pair of mittens, and a garbage truck, there are common characteristics to be found. The rabbit and the mittens could be grouped as "things that are soft." The garbage truck and the rabbit could be grouped as "things that move." The mittens and the truck could be grouped as "non-living things."

Help your students make similar connections between other unrelated items using the pocket chart. Place the word cards *live in water* at the top of the pocket chart. Place all animal cards (zebra, tiger, fish, leopard, dalmatian, ladybug, lizard, otter, lobster, alligator) in the pocket chart, in random order. Ask a student volunteer to remove the cards that do not fit under the heading (in other words, the animals that do not live in water should not appear in the chart). Repeat this activity using the header word cards *live on land*.

## Extending the activity:

Use the picture cards shown above and the word cards: *things*, *with*, *stripes*, *spots*, *living*, and *non-living* to practice sorting unrelated objects. Create the headings: *things with stripes*, *things with spots*, *living things*, *non-living things*, *animals with stripes*, and *animals with spots*. Place each heading at the top of the chart, and ask students to choose the picture cards that can be sorted into that group and place them into the pocket chart. You can also make a two-column header (for example, place the *living* card on the left side of the chart, and the *non-living* card on the right side of the chart) under which students can place the appropriate picture cards.





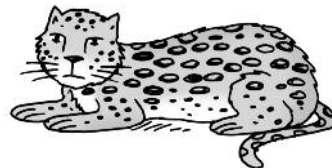
Name \_\_\_\_\_

**Activity 2**

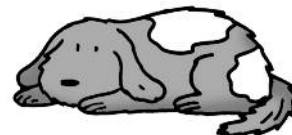
# Sorting Things

Directions: Draw a line to match the things to the words that describe them. You will draw more than one line to each item.

**has stripes**



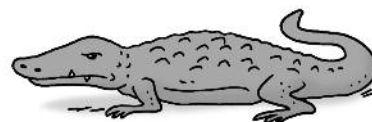
**lives in the water**



**lives on land**























**has spots**



# Teaching Notes: Counting 0-10

**Cards needed: (yellow ☀)**

|   |   |  |   |          |          |           |          |
|---|---|--|---|----------|----------|-----------|----------|
|  |  |  (x1) |  (x2)  | <b>0</b> | <b>1</b> | <b>2</b>  | <b>3</b> |
|  |  |  (x3) |  (x4)  | <b>4</b> | <b>5</b> | <b>6</b>  | <b>7</b> |
|  |  |  (x5) |  (x6)  |          |          |           |          |
|  |  |  (x7) |  (x8)  | <b>8</b> | <b>9</b> | <b>10</b> |          |
|  |  |  (x9) |  (x10) |          |          |           |          |
| zero  | one   | two  | three   | four     | five     |           |          |
| six   | seven   | eight  | nine  | ten      |          |           |          |

## Presenting the concept:

Begin by counting aloud from one to ten as a class. Then place the number cards 0-10 in the pocket chart, leaving an empty pocket between the pockets that contain number cards. (Place 0, 1, 2, 3, 4, and 5 in the first pocket; leave an empty pocket; then place 6, 7, 8, 9, and 10 in the next pocket.) Place the word cards *zero* through *ten* underneath the appropriate number cards, and read each word aloud. When students are comfortable with the word cards, remove them from below each numeral, and place them on a flat surface near the chart. Invite students to take turns selecting a word card and placing it under the appropriate number card. Or, place the number cards down the left side of the chart, and the word cards down the right side of the chart, in scrambled order. Invite students to unscramble the cards to match the numbers to the word cards.

After matching the word cards to the numbers several times, introduce the dot cards. Place the dot cards next to the matching number and word cards (for example, the one-dot card should be near the 1 card and the *one* card). Say each number, and count the dots on the corresponding card. Then remove the word cards and the numeral cards from the chart. Set the word cards aside, and spread the numeral cards on a flat surface. Scramble the dot cards so they are not in numerical order. Ask student volunteers to look at each dot card, count the number of dots on the card, and place the appropriate numeral card next to the dot card.

## Extending the activity:

Pass out the picture cards (1-10) among the students. Place the number 1 card in the pocket chart, and ask the student who is holding a picture of one object to place it in the chart near the 1. Ask the student to describe the picture on their card (for example, "I have a card with one ice skate on it"). Repeat this activity with cards 2-10.

Assign each child a number of things to collect from home. For example, ask one student to bring one item to class, another student should bring two items to class, etc. (Yes, the student who has to bring 10 items will have a lot more to worry about than the student who has to bring three!) Arrange the items on a large table, with the appropriate number and word cards nearby for a Counting Display!

Name \_\_\_\_\_

**Activity 3**

# Counting 0-10

Directions: Draw a line to connect each word with a number.  
Then count the items and write the total on the line below them.

zero

5

one

8

two

1

three

4

four

10

five

0

six

6

seven

2

eight

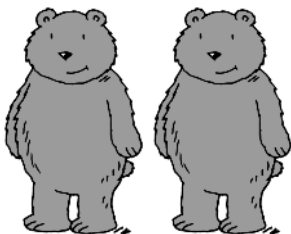
9

nine

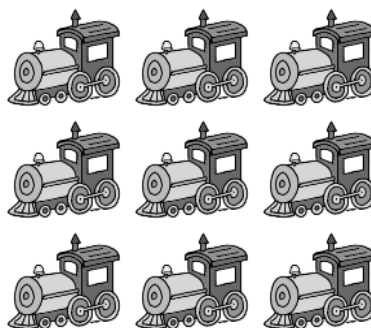
3

ten

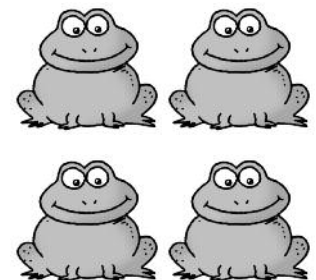
7



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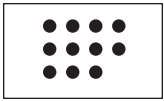
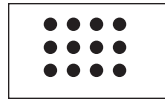
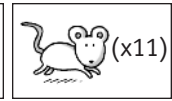
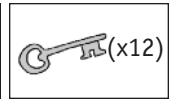
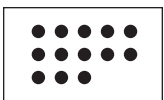
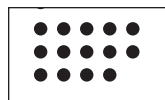
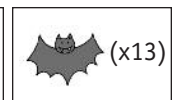
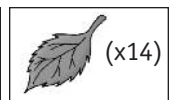
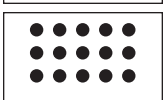
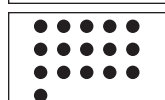
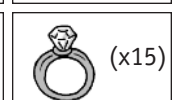
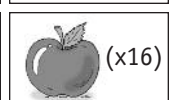
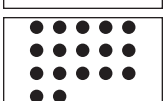
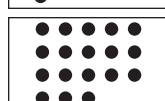
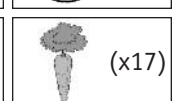
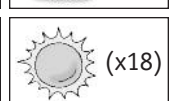
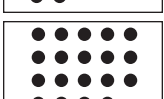
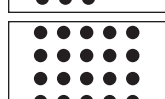
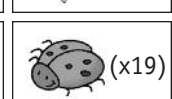

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# Teaching Notes: Counting 11-20

Cards needed: (green ☀)

|   |   |   |   |         |    |    |    |
|---|---|---|---|---------|----|----|----|
|  |  |  (x11) |  (x12) | 11      | 12 | 13 | 14 |
|  |  |  (x13) |  (x14) | 15      | 16 | 17 | 18 |
|  |  |  (x15) |  (x16) |         |    |    |    |
|  |  |  (x17) |  (x18) | 19      | 20 |    |    |
|  |  |  (x19) |  (x20) |         |    |    |    |
| eleven  | twelve  | thirteen  | fourteen  | fifteen |    |    |    |
| sixteen   | seventeen   | eighteen  | nineteen  | twenty  |    |    |    |

## Presenting the concept:

Begin by reviewing the numbers 0-10, and counting aloud from eleven to twenty as a class. Then place the number cards 11-20 in the pocket chart with the corresponding dot cards underneath each numeral. Place the word cards eleven through twenty on a flat surface near the chart. Invite students to take turns selecting a word card and placing it under the appropriate number and dot cards. Or, remove the dot cards from the chart, and place the number cards down the left side of the chart, and the word cards down the right side of the chart, in scrambled order. Invite students to unscramble the cards to match the numbers to the word cards. Then invite them to choose the dot card to form a trio of cards that all show the same number, in different ways (verbally, numerically, pictorially).

Set the word cards aside, and focus on counting. Place the picture cards down the left side of the pocket chart in random order, and the number cards down the right side of the pocket chart in random order. Ask students to match the picture cards to the number cards that represent the number of pictures (the card that shows 16 apples gets matched to the 16 number card).

## Extending the activity:

Pass out the picture cards 11-20 and the numeral cards 11-20 among the students so that each child has one card (depending on the size of your class, you may have to double-up on students or cards). Invite the students to move around the classroom, looking for the person who has the number (or picture) card that matches his or her picture (or number). For example, the student holding a card with nineteen ladybugs is looking for the student holding the 19 card. When all students have found their matches, trade cards and play again!



Name \_\_\_\_\_

**Activity 4**

# Counting 11-20

Directions: Draw a line to connect each set of dots  
with a number or word.

18

fifteen

eleven

20

fourteen

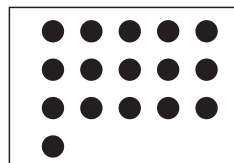
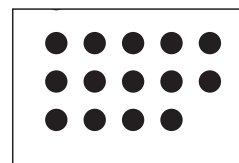
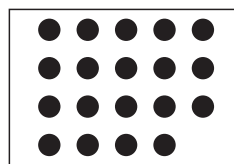
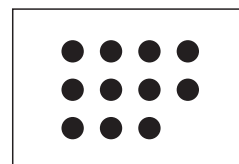
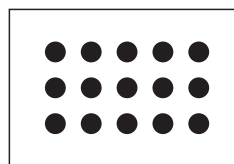
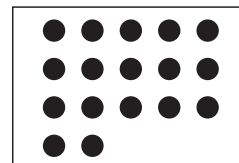
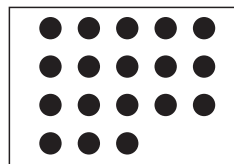
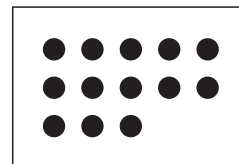
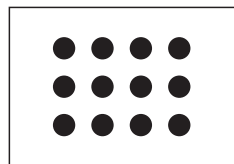
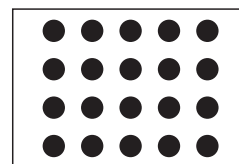
16

12

nineteen

13

seventeen



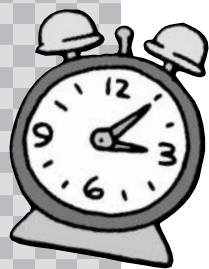
# Teaching Notes: Counting 0-20

Cards needed: (blue ☀)

all number cards; all number word cards



|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |



## Presenting the concept:

Now that your students have become familiar with the numerical, verbal, and graphic representations of each number, it's time to extend and apply their knowledge. Place the 21 word cards in random order in the pocket chart, and ask students to rearrange them in numerical order. Repeat this activity with the dot cards and number cards, too.

Gather 20 objects (20 paperclips, 20 pencils, 20 pennies, etc.) and place them in a pile. Mix the dot cards and number cards into a large "go fish" pile. Ask students to select a card from the pile and use the correct number of objects to "count out" that number. For a tasty version of this activity, give each student 20 edible objects (grapes, candies, pretzels, etc.) and invite them to count out these objects to match the numbers on the cards. If you feel students are up to the challenge, encourage them to group their objects in twos, threes, and fives, or arrange them in different shapes to start to become accustomed to seeing different quantities of objects arranged in different ways. Use this as an introduction to counting by twos, threes, and fives.

## Extending the activity:

Have a "Quick Count" showdown in your classroom! Place the picture cards for 1-10 (or 11-20) in rows on the sides of the pocket chart, so there are five on the left side of the chart, and five on the right side. Use index cards cut to the shape of the pocket chart cards to serve as "blocker cards" by placing them in front of each picture card. Spread out the number cards and word cards randomly near the pocket chart. Invite two students to the pocket chart, and assign each student one side of the chart (and therefore, one set of five cards) as "theirs" to choose from. When you say "go," each student should remove one of the blocker cards from in front of one of the five cards on his or her side of the pocket chart, count the pictures on the card, and find the number card and/or word card that matches the picture card he or she uncovered. The first student to match a number and/or word card to his or her picture card wins that round. (Note: This activity may be limited by the two-sided arrangement of the cards.)



Name \_\_\_\_\_

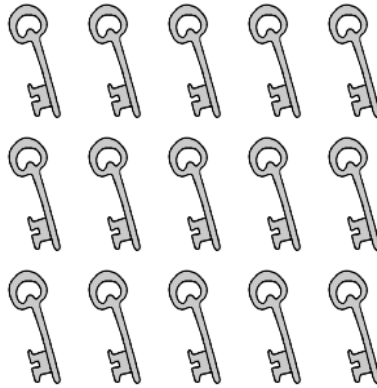
# Activity 5

## Count Them Up!

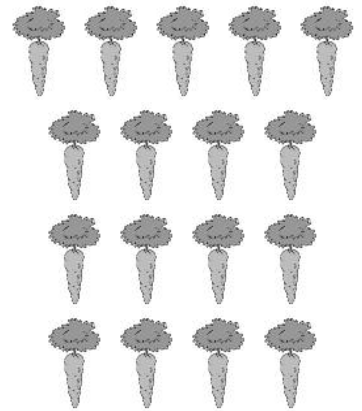
Directions: Count each set of objects, and write the number on the line below each set.



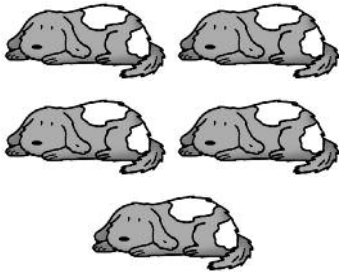
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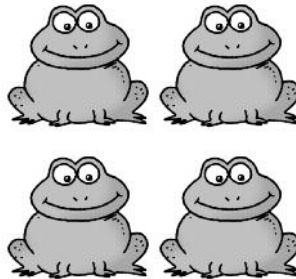
\_\_\_\_\_



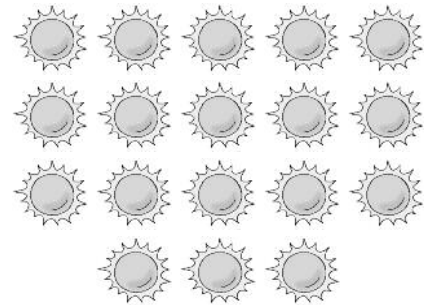
\_\_\_\_\_



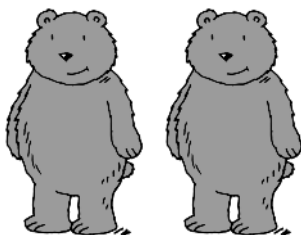
\_\_\_\_\_



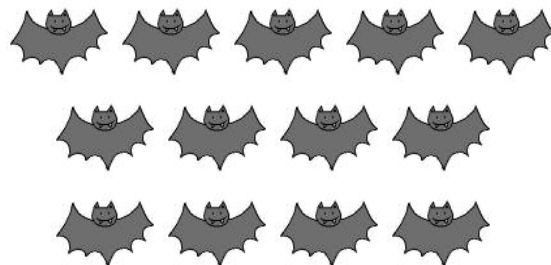
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

# Teaching Notes: Counting and Sorting

Cards needed: (purple ☀ )

|   |   |   |   |   |  |   |   |   |   |    |
|---|---|---|---|---|--|---|---|---|---|----|
|  |  |  |  |  |  |  |  |  |   |    |
|  |  |  |  |  |  |  |  |  |   |    |
|  |  |  |  |  |  |  |  |  |   |    |
| 0   | 1   | 2   | 3   | 4   | 5  | 6   | 7   | 8   | 9 | 10 |

## Presenting the concept:

Now combine sorting with counting! Place the animal cards shown above in the pocket chart. Place the number cards on a flat surface near the pocket chart. Ask students the following questions, and ask them to select a number card that shows their answer, and place it in the chart for their classmates to see.

- How many animals have stripes? (3)
- How many animals have tails (9, if you count the fish)
- How many animals have 4 legs? (7)
- How many animals have fins? (1)
- How many animals live in the water? (4)
- How many animals have spots? (4)
- How many animals are there in total? (10)
- How many animals have 2 legs? (0)

Repeat this activity by substituting the people cards for the animal cards, and asking the following questions:

- How many people are boys? (5)
- How many people are girls? (5)
- How many people have long hair? (3)
- How many people have short hair? (7)
- How many people wear glasses? (3)
- How many people have a beard? (2)
- How many people wear stripes? (3)
- How many people wear spots? (3)

## Extending the activity:

Ask your students to identify common characteristics among their classmates, and post the results in the pocket chart! Choose some physical attributes (hair color, having freckles or braces, wearing solids or patterns, etc.) and create pocket chart cards for them using blank index cards cut to a size that will fit in the chart. For example, if you want to count how many students have blonde hair, make an index card that says "blonde hair," ask the students to count how many of their classmates have blonde hair, and place the correct number card under your *blonde hair* card.

## Note to teachers:

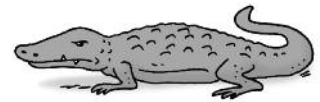
Use the bingo cards on pages 30-31 to improve your students' familiarity with numbers and counting. Photocopy the card pages, cut apart the cards, and give one to each student. Call out random numbers between 0-20 (keep track of the numbers you call) and ask students to look at their bingo card and mark the numbers you call. The first student with four marked spaces in a row calls out "BINGO!"

Name \_\_\_\_\_

# Activity 6

## Count and Sort


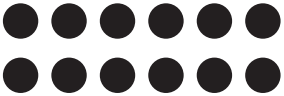

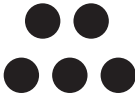


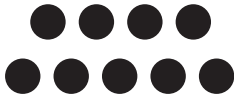


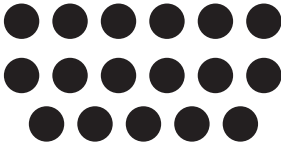
Directions: Look at the pictures below. Then listen as your teacher reads you each description. Write the correct number on the line next to the words to show how many of the pictures fit each description.

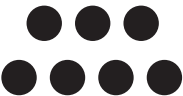

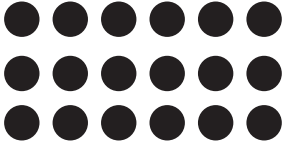




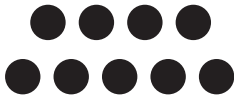




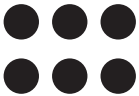



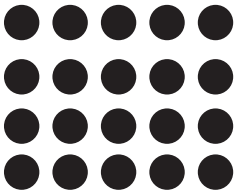
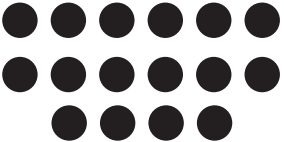




### How many...







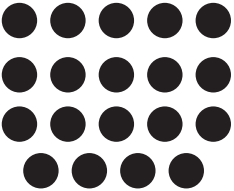



1. have stripes? \_\_\_\_\_
2. like to swim? \_\_\_\_\_
3. wear clothes? \_\_\_\_\_
4. have spots? \_\_\_\_\_
5. are alive? \_\_\_\_\_
6. have four legs? \_\_\_\_\_
7. have a tail? \_\_\_\_\_
8. wear glasses? \_\_\_\_\_



|   |   |  |   |
|---|---|--|---|
| 4   |  | 10   | 0   |
|  |  |  |  |
|  | 16  | 11   |  |
|  |  |  | 2   |

|   |   |  |   |
|---|---|--|---|
|  |  | 14   |  |
|  | 3   |  | 10  |
| 20  |  |   |  |
|  |  | 6  | 8   |

|   |   |   |   |
|---|---|---|---|
| <b>2</b>  |  |  | <b>9</b>  |
|  |  | <b>12</b>   |  |
| <b>11</b>   |  |   | <b>6</b>  |
|  | <b>19</b>   |   |  |

|   |   |  |   |
|---|---|--|---|
|  | <b>5</b>  |  |  |
| <b>15</b>   |  |  | <b>18</b>   |
|  |  | <b>1</b>   |  |
|  |  | <b>13</b>  | <b>7</b>  |

# Reading List

## One Lonely Sea Horse

Saxton Freyman, Joost Elffers  
Arthur A. Levine, NY: 2000

## One Fish Two Fish Red Fish Blue Fish

Dr. Seuss  
Random House, NY: 1981

## Turtle Splash: Countdown at the Pond

Cathryn Falwell  
Greenwillow Books, NY: 2001

## 1 Is One

Tasha Tudor  
Simon & Schuster, NY: 2000

## Mrs. McTats and Her Houseful of Cats

Alyssa Satin Capucilli  
Margaret McElderry: 2001

## Ten Little Ladybugs

Melanie Gerth  
Piggy Toes Press: 2001

## My Little Sister Ate One Hare

Bill Grossman  
Crown Publishers, NY: 1996

## Counting Crocodiles

Judy Sierra  
Harcourt Brace & Co., San Diego, CA: 1997

## The Baseball Counting Book

Barbara Barbieri McGrath  
Charlesbridge Publ., Watertown, MA: 1999

## Each Orange Had 8 Slices: A Counting Book

Paul Giganti  
Greenwillow Books, NY: 1992

## Seven Stars More!

Kathy Mallat  
Walker & Co., NY: 1998

## One Hundred Angry Ants

Bonnie MacKain  
Houghton Mifflin Co., Boston: 1999

## Two Ways to Count to Ten

Ruby Dee  
H. Holt, NY: 1988



# Cards-At-A-Glance

Cards are shown as front-to-back pairs.

|    |  |    |  |          |            |           |  |
|----|--|----|--|----------|------------|-----------|--|
| 1  |  | 14 |  | one      |            | seventeen |  |
| 2  |  | 15 |  | two      |            | eighteen  |  |
| 3  |  | 16 |  | three    |            | nineteen  |  |
| 4  |  | 17 |  | four     |            | twenty    |  |
| 5  |  | 18 |  | five     |            | zero      |  |
| 6  |  | 19 |  | six      |            |           |  |
| 7  |  | 20 |  | seven    |            |           |  |
| 8  |  | 1  |  | eight    |            |           |  |
| 9  |  | 2  |  | nine     |            |           |  |
| 0  |  | 3  |  | ten      |            |           |  |
| 10 |  | 4  |  | eleven   |            |           |  |
| 11 |  | 5  |  | twelve   |            |           |  |
| 12 |  | 0  |  | thirteen |            |           |  |
| 13 |  |    |  | fourteen |            |           |  |
|    |  |    |  | fifteen  |            |           |  |
|    |  |    |  | sixteen  |            |           |  |
|    |  |    |  | old      | brown      |           |  |
|    |  |    |  | without  | boys       |           |  |
|    |  |    |  | young    | black      |           |  |
|    |  |    |  | a hat    | girls      |           |  |
|    |  |    |  | glasses  | animals    |           |  |
|    |  |    |  | things   | spots      |           |  |
|    |  |    |  | water    | people     |           |  |
|    |  |    |  | live on  | with       |           |  |
|    |  |    |  | blonde   | stripes    |           |  |
|    |  |    |  | land     | non-living |           |  |
|    |  |    |  | hair     | live-in    |           |  |
|    |  |    |  | a beard  | living     |           |  |