## Counting and Cardinality

## Order of Numbers

Although many young children are able to count, often they have not yet developed an understanding of what the numbers mean. It is important that children develop a one-to-one correspondence between numbers and sets of objects. By learning and practicing this concept, children also learn the concept of sequencing, or order.

## Common Core State Standards

- K.CC. 6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- K.CC. 7 Compare two numbers between 1 and 10 presented as written numerals.

Perform the Try It! activity on the next page.

## Talk About It

Discuss the Try It! activity.

- Say: Let's count to 5. Ask: What number do we say first when we count? Say: Make a chain that shows 1. Ask: What number comes after 1? Say: Now make a chain that shows 2. Ask: How do you know that 2 comes after 1?
- Repeat this line of questioning for other numbers. Elicit from children that, when counting forward by ones, each number is one more than the number before it. Use the links to reinforce this concept.


## Solve It

With children, reread the problem. Then take the class out to the playground. Divide children into pairs, and give each pair some chalk and Link ' $N$ ' Learn ${ }^{\circledR}$ Links. Help pairs draw hopscotch patterns. Have children solve the problem by numbering the boxes in order from 1 to 5 . Then let children play hopscotch using the links as markers.

## More Ideas

For other ways to teach about the order of numbers 1 through 5-

- Have children use Snap Cubes ${ }^{\circledR}$ to make one train for each number from 1 to 10. Have them use one color for each train. Then have them line up the trains in order from 1 to 5.
- Provide one set of Number Cards (BLM 2; cards 1-5) and counters at a center. Instruct children to make sets of objects to match each number. Children can place counters on the dots for self-checking and reinforcement. Extend the activity by providing a reverse order of numbers $(5,4,3,2,1)$ and a mixed order of numbers (for example, 2, 1, 3, 5, 4).


## Formative Assessment

Have children try the following problem.
Which set of dots is in order from 1 to 3? Circle it.

## Try It !

Here is a problem about number order.
At recess, Jenna's teacher drew a hopscotch pattern on the sidewalk. She asked Jenna to number the boxes from 1 to 5. This is how Jenna numbered the boxes. Jenna's teacher asked her why she ordered the numbers this way. Jenna said that 2 is one more than 3, so it comes after. Is Jenna correct?


Introduce the problem. Then have children do the activity to solve the problem.

Give a set of index cards and 15 assorted Link 'N' Learn Links to each child. Children will need enough of an assortment so that they can build chains using five different colors.


1. Have children make and place a card with the number 1 in front of them. Ask children to build a chain made of one link and place it above the card.

2. Using different colors for each chain, have children make cards and build chains for the numbers 3-5. Then guide children to order the numbers and chains like the vertical hopscotch pattern.

## Materials

- Link 'N' Learn ${ }^{\circledR}$ Links (15 per pair)
- index cards (5 per pair)
- crayons


2. Now have children build a different-color chain that has one more link than the first chain. Have them place this second chain near the first chain for comparison. Ask children to make a number card that matches and place it below the new chain.

## A Look Out!

Children may have difficulty matching the numbers to the corresponding sets. Encourage children to count the items in the set, touching each item as it is counted. Remind them that the last number they say when counting is the name for that set. For children still struggling, provide "landing spots," such as small circles, in which children can place links before connecting them below number cards.


2
3
4




## Directions

1. Draw a set of dots in each box to match the number above the box. from 1 to 5.
2. Circle the set of dots that is in order

## Answer Key

## Check children's work.

## Challenge

Write the number that comes after 4. Draw a set of dots for the number you wrote.
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## Directions

1. Draw a set of dots in each box to match the number above the box. from 1 to 5.

Name

## Challenge

Write the number that comes after 4. Draw a set of dots for the number you wrote.

