

LESSON 3

Objective

Count and order numbers 0–20.

Common Core State Standards

- **1.NBT.2b** The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

Number and Operations in Base Ten

Ordering Numbers

Counting numbers and ordering them is a requirement for performing most mathematical concepts. A number doesn't mean anything to a child until he or she knows how many the number represents and where it goes on a number line or how it relates to other numbers. Children learn to interpret the count sequence as a list of numbers arranged in order of increasing magnitude. This understanding is a conceptual starting point for comparing numbers and working with the concepts of less than and greater than.

Try It! Perform the Try It! activity on the next page.

Talk About It

Discuss the Try It! activity.

- Have children look at the DecaDots® tiles used in the Try It! activity.
- **Ask:** Which tile did you put down first? next? last?
- **Ask:** Which tiles did you replace with a ten tile? What did you do after you had placed the ten tile? Which tiles did you replace with a zero tile?
- **Ask:** How did you know which tiles were missing?

Solve It

With children reread the problem. Ask children to write a sentence using ordered numbers. Encourage them to say 1 more and 1 fewer in their descriptions.

More Ideas

For other ways to teach about counting and ordering numbers—

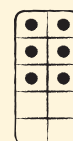
- Have children use Snap Cubes® and number cards to count and order groups to 10. For each number card, have children build a corresponding cube tower. Children then place the cube towers and number cards in order from 0–10.
- Create a number line and use Snap Cubes to count and order groups to 20. Have them arrange their cubes in ascending order in the appropriate number line position.
- Use Cuisenaire® Rods and have students build a staircase with the rods to help them see the correct ordinal position.

Formative Assessment

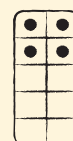
Have children try the following problem.

Match the pictures to the numbers.

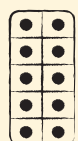
10



6



4



Try It! 30 minutes | Pairs

Here is a problem using ordering.

Jeremy has a set of cards labeled 0–20 on his desk. He counts them and notices that three of the cards are missing. How can Jeremy determine which cards are missing?

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

Say: *Let's show Jeremy how to determine which cards are missing.*

Materials

- DecaDots® wallet (1 per pair)



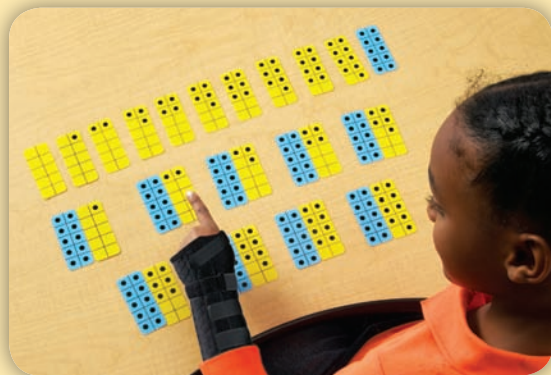
1. To begin, give each pair of children a DecaDots wallet set, and have them remove the tiles.



2. Have children arrange the tiles in a row in ascending order from 0–20. **Ask:** *How do you show a number past 10?*

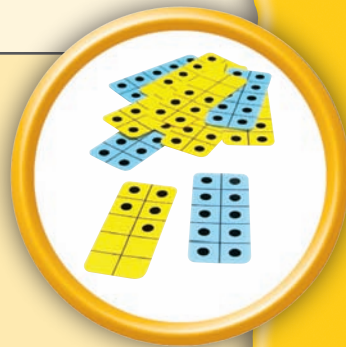
⚠ Look Out!

Watch for children who have difficulty placing the numbers in the correct order. Assist these children by placing numbered cards in order and then have them place the corresponding DecaDot tile(s) above the numbered card.



3. Finally, have the children touch each DecaDot as they recite the corresponding number.

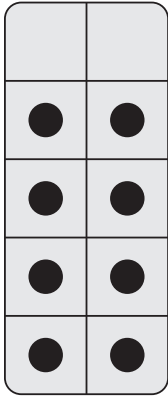
Ask: *How would we know if one were missing?*



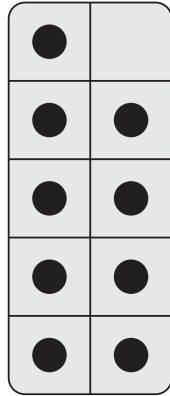
Use DecaDots. Write each number modeled.

Write the three numbers that come next. (Check students' work.)

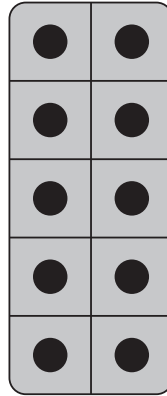
1.



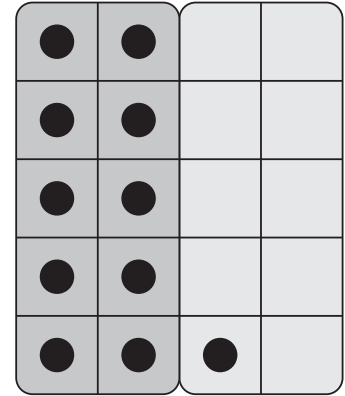
8



9



10



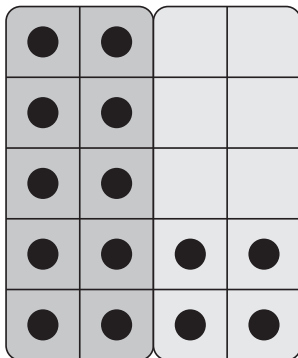
11

Next three numbers: 12 13 14.

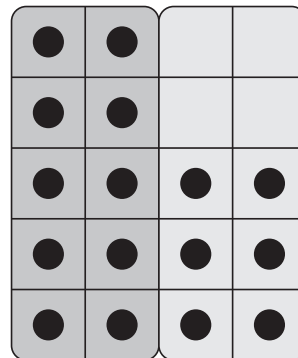
Use DecaDots. Make the missing number.

Draw the model. Write the numbers.

2.



14



16

Missing number: 15

Answer Key

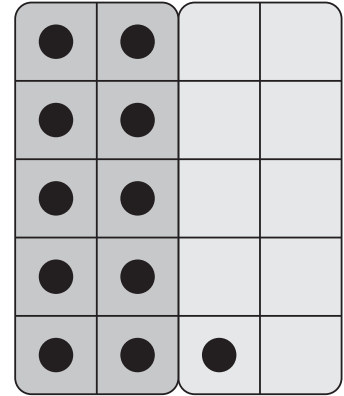
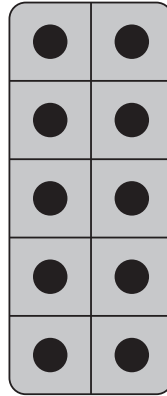
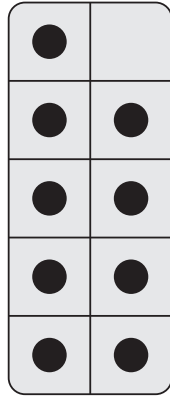
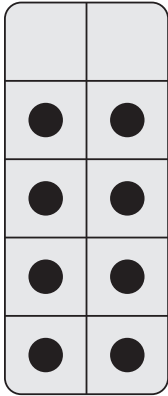
Challenge! What numbers between 0 and 20 use two DecaDots tiles?

Challenge: 11 to 20

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Use DecaDots. Write each number modeled.
Write the three numbers that come next.

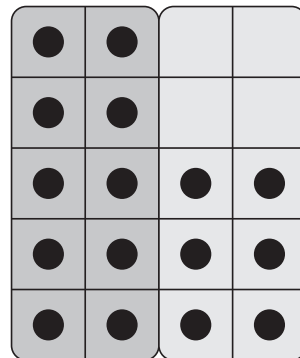
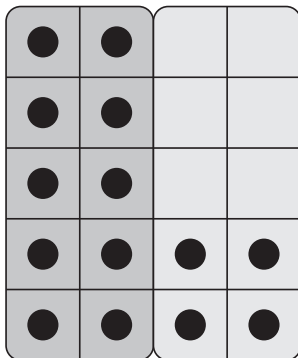
1.



Next three numbers: _____ .

Use DecaDots. Make the missing number.
Draw the model. Write the numbers.

2.



Missing number: _____

Name _____

Challenge! What numbers between 0 and 20 use two DecaDots tiles?

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