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Focused Mathematics Intervention— Level K

This sample includes the following:

Teacher's Guide Cover (1 page)

Teacher's Guide Table of Contents (1 page)

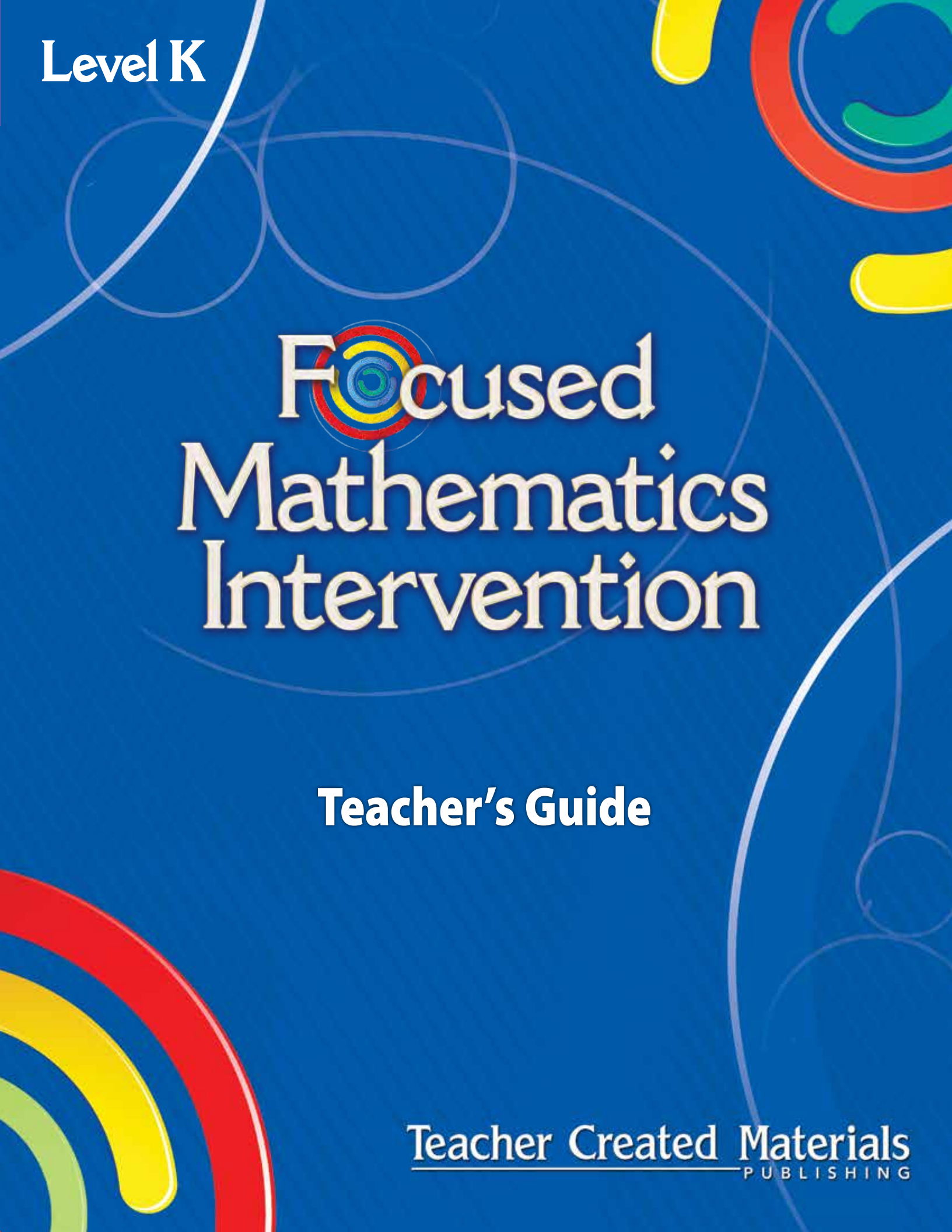
How to Use This Product (3 pages)

Lesson Plan (17 pages)

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Level K



Focused Mathematics Intervention

Teacher's Guide

Teacher Created Materials
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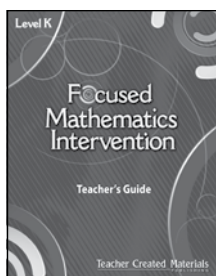
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Kit Components

Teacher's Guide

30 easy-to-use, standards-based lesson plans



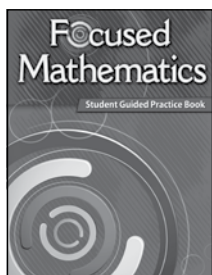
3 Digital Math Fluency Games

Focus on mathematical skills and strategies, and are on the Digital Resources USB Device



Student Guided Practice Book

Full-color student activities

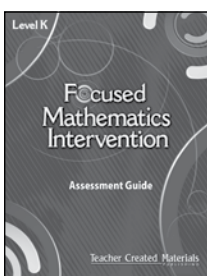


Digital Resources

- PDFs of all student materials, game sets, activity sheets, assessments, etc.
- PDFs of teacher resources
- Digital Math Fluency Games
- Electronic versions of the Pretest, Posttest, Performance Tasks, and reporting tools

Assessment Guide

Includes a pretest, posttest, performance tasks with assessments, and the answer key for the *Student Guided Practice Book*



Refocus Mini Lesson

Provide as PowerPoint® and PDF files



3 Math Fluency Game Sets

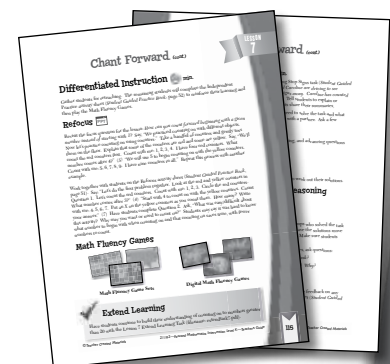
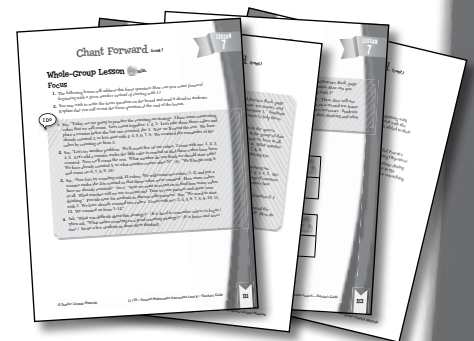
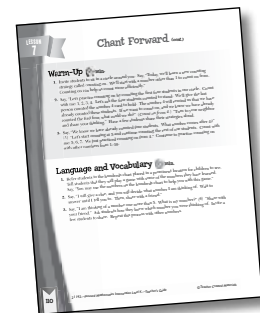
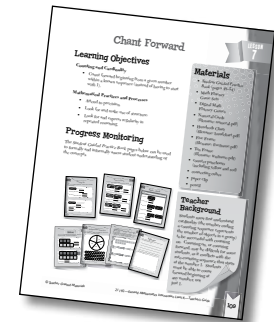
Include a game board, directions, an answer key, and game pieces



Teacher's Guide

Each 8-page lesson is organized in a consistent format for ease of use. Teachers may choose to complete some or all of the lesson activities to best meet the needs of their students. Lesson materials can be utilized flexibly in a variety of settings. For example, modeling with a small group, using printed materials with a document camera, or using PDF materials on a digital platform, such as an interactive whiteboard. Each lesson includes:

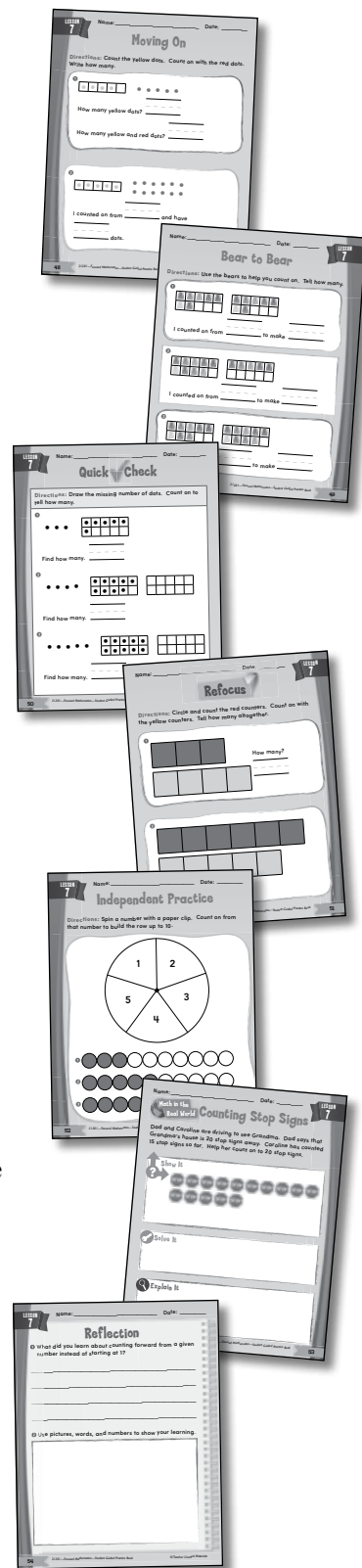
- an overview page with key information for planning
- key mathematics content standards covered
- key mathematical practices and processes addressed
- an overview providing teacher background or student misconceptions
- a Warm-Up activity to build students' recall of important mathematical concepts
- a whole-class Language and Vocabulary activity
- time markers to indicate the approximate time for instruction
- a whole-class section focusing on the key concept/skill being taught
- use of the Gradual release of responsibility model in the Whole-Group lesson section
- differentiation strategies to support and extend learning with the Refocus lesson and Extend Learning activity
- math fluency games that motivate students to develop and reinforce mastery of basic skills
- a Math in the Real World concept task activity



Student Guided Practice Book

Each lesson in the *Teacher's Guide* has seven corresponding student pages in the *Student Guided Practice Book*:

- a We Do activity to support the gradual release of responsibility model
- a You Do activity to facilitate independent practice
- a Quick Check to easily monitor students' progress
- a Refocus activity for students who need more instruction
- an Independent Practice page to reinforce mathematical content taught in the lesson
- a Math in the Real World concept task for students to apply the math concept in a real-life scenario
- a Reflection page for students to share their mathematical understanding



Counting by Tens

Learning Objectives

Counting and Cardinality

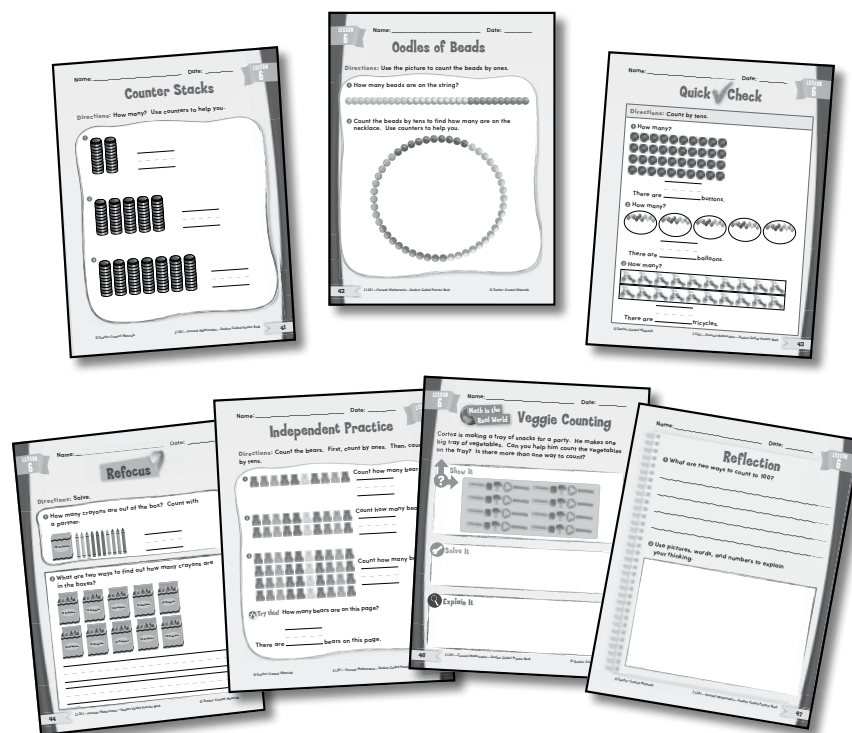
- Count to 100 by ones and by tens.

Mathematical Practices and Processes

- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Progress Monitoring

The *Student Guided Practice Book* pages below can be used to formally and informally assess student understanding of the concepts.



Materials

- Student Guided Practice Book* (pages 41–47)
- Math Fluency Game Sets
- Digital Math Fluency Games
- Hundreds Chart (filename: hundchart.pdf)
- counter punchouts
- connecting cubes (two colors)
- paper bag
- crayons (10 boxes of 10, plus one box of 10 per student)

Teacher Background

To help students successfully count to 100 by tens, teachers must provide repetitive practice with the 1–9 counting sequence and the decade numbers. Teachers may need to help students understand the decade transitions counted after the numbers 19 (20), 29 (30), 39 (40), etc. Teachers may also need to focus on students having difficulty pointing to objects as they simultaneously state the number word sequence.

Counting by Tens *(cont.)*

Warm-Up (10) min.

1. Invite students to sit in a circle around you to play a game.
2. Prior to the lesson, place five connecting cubes in a bag without the students seeing. Tell students they will be counting cubes to find a mystery number.
3. Pair up students and say, “My mystery number is between 0–10. Turn to your partner and tell what you think my mystery number may be.” Then say, “Let’s count the cubes that are in the bag.” Invite two students to help.
4. Say, “One student will take out cubes, and one will connect the cubes that were taken out. We will count together as we take out the cubes. Then, we’ll check our answer by counting the connected cubes.” Count until all five cubes have been withdrawn from the bag. Then, count the cubes that are connected together.
5. Ask, “What was your mystery number? Was your guess close?”
6. Say, “Let’s play again. The mystery number will be between 0–10.” Place a different number of cubes in the bag. Count the withdrawn cubes. Then, count them again once they have been connected.
7. Repeat this process with numbers 0–10. You may also allow a student to put the mystery number of cubes into the bag.

Language and Vocabulary (10) min.

1. Post the hundreds chart in a prominent location for students to see.
2. Invite students to chant the numbers with you, varying their voices to mark different decade numbers. Say, “Let’s practice the first 10 numbers (1–10) in a squeaky voice.”
3. Have students chant numbers 11–20 in a deep voice; numbers 21–30 in a loud voice; numbers 31–40 in a soft voice; numbers 41–50 in a deep voice; numbers 51–60 in a squeaky voice; numbers 61–70 in a loud voice; numbers 71–80 in a soft voice; numbers 81–90 in a deep voice; and numbers 91–100 in a squeaky voice.
4. Now have students chant counting to 100 by tens using a slow-motion voice.

Counting by Tens *(cont.)*

Whole-Group Lesson (40) min.

Focus

1. The following lesson will address this focus question: *What are two ways we can find out how many objects are in a group?*
2. You may wish to write the focus question on the board and read it aloud to students. Explain that you will revisit the focus question at the end of the lesson.

I Do

1. Say, “Today we will count objects by two groups: ones and tens. Let’s count this stack of counters. I am going to count them by ones first. Count with me: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. What is another way we can count the counters?” (*by tens*) “Let’s make a stack of 10. Count with me 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. This stack is a 10. Now how can we make a group of 20? Let’s count by ones.” Walk through the process of counting a group of 20 by ones. Say, “How can we make a group of 20 by counting by tens? Let’s make a stack of 10, then another stack of 10. This makes 20. Two stacks of 10 make 20. Let’s count this stack of counters by tens.” Explain that stacks of 10 counters can be counted by tens.

Language Support

As you model, emphasize the number words. Reinforce students’ understanding by asking them to rote count and referring them to the hundreds chart.

Counting by Tens *(cont.)*

Whole-Group Lesson 40 min.

**We Do**

1. Have students work in pairs to complete the Counter Stacks activity sheet (*Student Guided Practice Book*, page 41).
2. Say, “Question 1 shows two stacks of counters. What are two ways we can find out how many counters are in the group?” (*Count by ones and count by tens.*)
3. Say, “First, count the counters to find 20 counters.” Then, have students count by tens. Ask, “How many counters did you count?” (*two groups of ten, or 20*)
4. Say, “Question 2 shows more stacks of counters. We can count the counters by ones, or we can count them by tens. Turn to your partner to discuss how you will count.”
5. Encourage students to count by ones or tens. Ask, “How many counters are in the stacks?” (*50*)
6. Say, “Look at Question 3. Let’s count the stacks of counters by tens. Count with me: 10, 20, 30, 40, 50, 60, 70. We counted 70 counters by tens. Turn and tell your partner if you would rather count by ones or by tens. Why?”

Counting by Tens *(cont.)*

Whole-Group Lesson (40) min.

You Do

1. Refer students to Question 1 on the Oodles of Beads activity sheet (*Student Guided Practice Book*, page 42). Have cubes in two colors available for counting, and invite students to work in pairs to solve the problems.
2. Say, “Let’s do Question 1 together. Question 1 shows beads in three colors (groups of 10) on a string for us to count.”
3. Ask, “What are two ways we can find out how many beads are in the group?” (*Count by ones and by tens.*)
4. Say, “Count the beads by ones with your partner. Tell your partner the number of beads you count on the string.” (30)
5. Say, “Let’s look at Question 2. We see beads connected by color in groups of 10. How do you think you will count the beads on the string?” (*by ones and by tens*)
6. Say, “Since we counted beads by ones in Question 1, let’s count by tens for Question 2.” Have students tell their partners how many beads they counted. (50)
7. Ask, “How do you know your answer is correct?” (*Both partners counted 5 groups of 10.*)
8. Ask students if they would rather count by ones or tens. Ask, “Why is counting by tens faster? Turn to your partner and explain your thinking.” (*There are fewer numbers to count.*)

Counting by Tens *(cont.)*

Whole-Group Lesson *(cont.)*

Closing the Whole-Group Lesson

Revisit the focus question for the lesson: *What are two ways we can find out how many objects are in a group?* Have students explain how the lesson added to their understanding of counting.

Progress Monitoring **5** min.

1. Have students complete the Quick Check activity sheet (*Student Guided Practice Book*, page 43) to gauge student progress toward mastery of the Learning Objectives.
2. Based on the results of the Quick Check activity sheet and your observations during the lesson, identify students who may benefit from additional instruction in the Learning Objectives. These students will be placed into a small group for reteaching. See instructions on the following page.

Counting by Tens *(cont.)*

Differentiated Instruction (20) min.

Gather students for reteaching. The remaining students will complete the Independent Practice activity sheet (*Student Guided Practice Book*, page 45) to reinforce their learning and then play the Math Fluency Games.

Refocus

Revisit the focus question for the lesson: *What are two ways we can find out how many objects are in a group?* Ask, “How can we find out how many crayons are in a box?” (*We can count the crayons.*) Give each student a box of 10 crayons. Ask students to take out the crayons and count them with you: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. Have students turn and tell a neighbor how many crayons are in their box. (*10 crayons*) Say, “We counted the crayons by ones. We counted 10 crayons in each box. What is a way we can count all of the crayon boxes?” (*We can count the boxes of crayons by tens.*) “We will begin counting by tens with my box. We will continue counting by tens to see how many crayons we have. Count with me by tens: 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.” (If you have more than 10 boxes of crayons, count again, beginning with 10.)

Refer students to Question 1 on the Refocus activity sheet (*Student Guided Practice Book*, page 44). Have boxes of crayons available for counting. Say, “Let’s do Question 1 together. Question 1 shows a crayon box with crayons outside the box. The question asks *How many crayons fit in the box?* We will count by ones to find out. Count with me: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.” Then say, “We counted 10 crayons.” Repeat this process for Question 2. Then, ask students what was difficult/easy about the activity.

Math Fluency Games



Math Fluency Game Sets



Digital Math Fluency Games



Extend Learning

Have students continue to practice counting to 100 by ones and tens by completing the Lesson 6 Extend Learning Task (filename: extendtask6.pdf). Students will use counters and practice counting by ones, and then counting by tens.

Counting by Tens *(cont.)*

Math in the Real World 30 min.

1. Refer students to the Math in the Real World: Veggie Counting task (*Student Guided Practice Book*, page 46). Read the task aloud to the students: *Cortez is making a tray of snacks for a party. He makes one big tray of vegetables. Can you help him count the vegetables on the tray? Is there more than one way to count?* Tell students to explain or summarize the task to their partner. Have a few students share their summaries.
2. Ask students to think about what information they will need to solve the task and what the task is asking them to do. Then, have them share with a partner. Ask a few students to share aloud.
3. Have students work in groups of two or three to complete the task.
4. As students are working, circulate and ask focusing, assessing, and advancing questions such as:
 - *What information do you know?*
 - *How will you find out how many vegetables Cortez has?*
 - *How can you explain your reasoning?*

Have students use the Show It/Solve It/Explain It template to work out their solutions.

Sentence Frames for Explaining Reasoning

- *I can use _____ to help me solve this problem.*
 - *Cortez has _____ vegetables.*
 - *I solved this problem by _____.*
5. Observe how students are solving the task, and choose a few groups who solved the task in different ways to share their solutions and reasoning. Try to have the solutions move from concrete representations to more abstract representations. Make sure students explain their reasoning as they share solutions.
 6. As groups are sharing their solution paths, reasoning, and strategies, ask questions:
 - *How is this strategy similar to one we have seen in a previous task?*
 - *Do you agree or disagree with the solution path and reasoning? Why?*

Lesson Reflection 5 min.

Have students summarize their learning about counting by ones and tens to 100, and provide feedback on any questions they still have about the content on the Reflection activity sheet (*Student Guided Practice Book*, page 47).

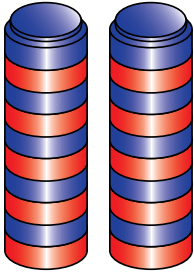
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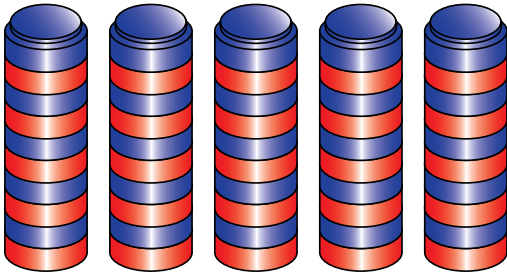
Counter Stacks

Directions: How many? Use counters to help you.

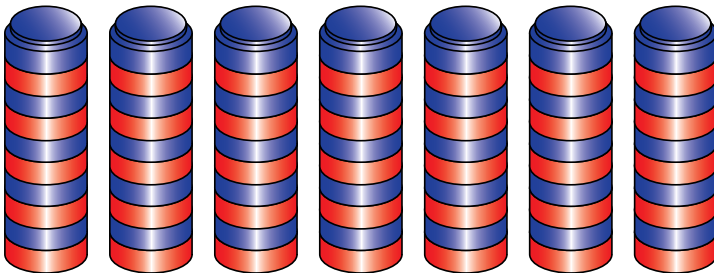
1



2



3



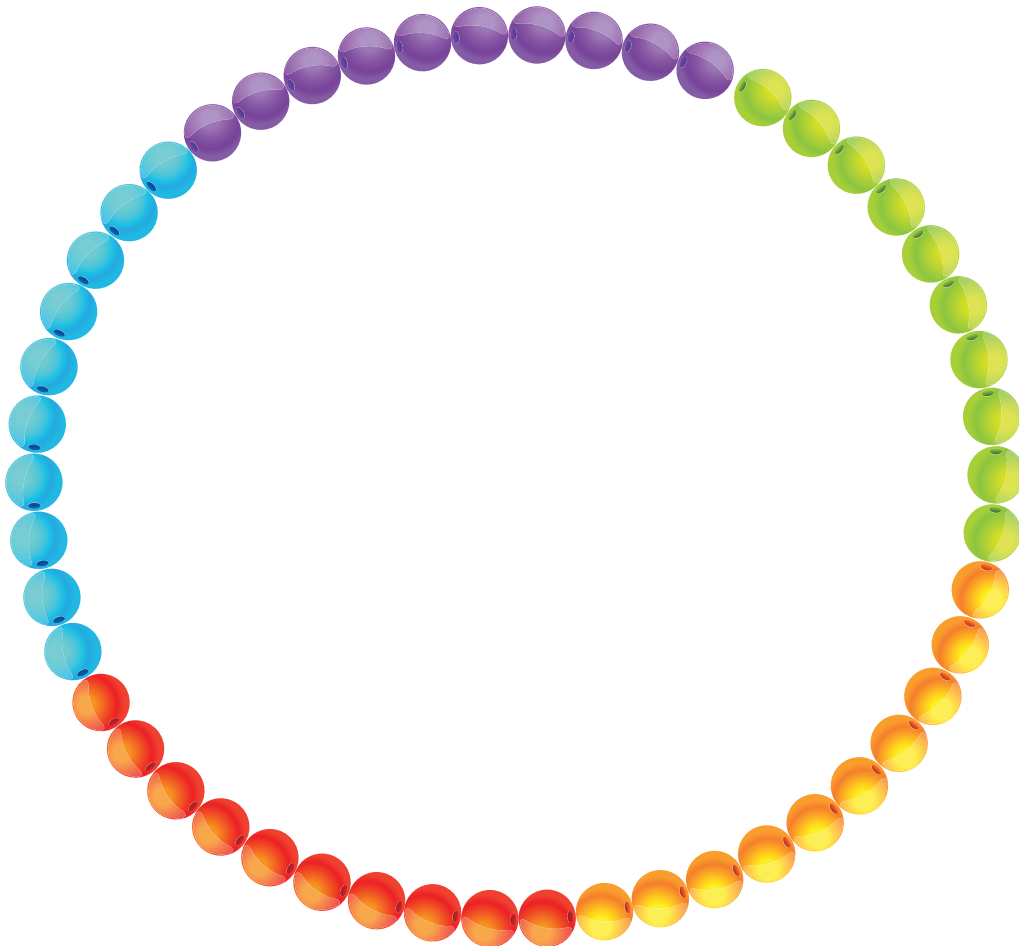
Oodles of Beads

Directions: Use the picture to count the beads by ones.

- ① How many beads are on the string?



- ② Count the beads by tens to find how many are on the necklace. Use counters to help you.



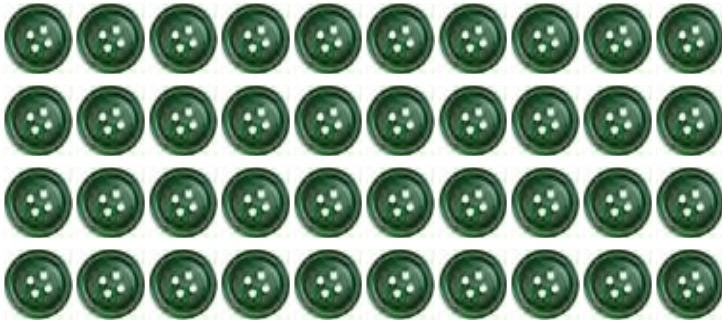
Name: _____

Date: _____

Quick Check

Directions: Count by tens.

1 How many?



- - - - -

There are _____ buttons.

2 How many?



- - - - -

There are _____ balloons.

3 How many?



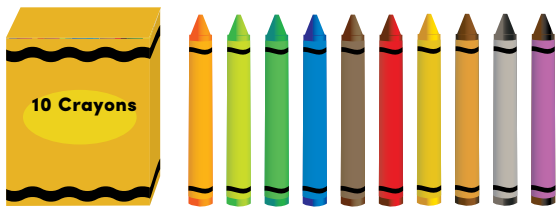
- - - - -

There are _____ tricycles.

Refocus

Directions: Solve.

- 1 How many crayons are out of the box? Count with a partner.



- 2 What are two ways to find out how many crayons are in the boxes?



Name: _____

Date: _____

Independent Practice

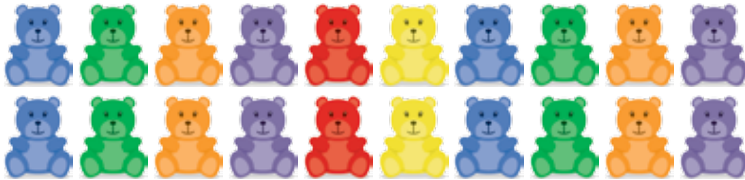
Directions: Count the bears. First, count by ones. Then, count by tens.

1



Count how many bears.

2



Count how many bears.

3



Count how many bears.

23 Try this! How many bears are on this page?

There are _____ bears on this page.

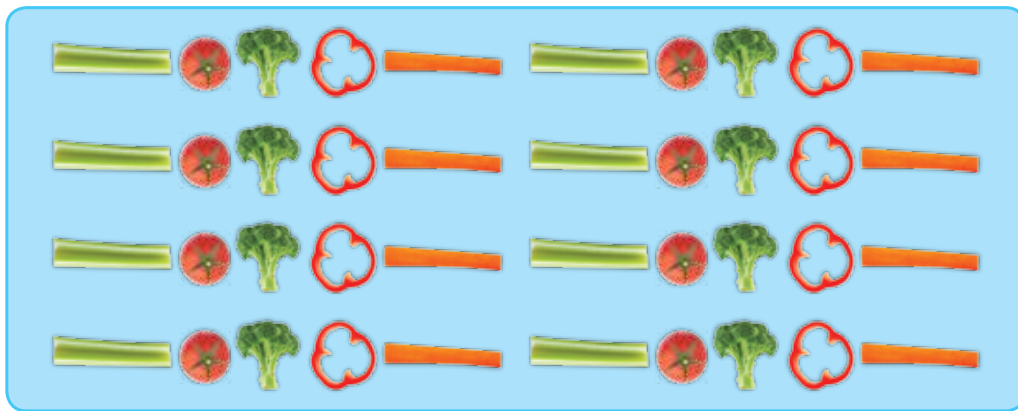


Veggie Counting

Cortez is making a tray of snacks for a party. He makes one big tray of vegetables. Can you help him count the vegetables on the tray? Is there more than one way to count?



Show It



Solve It



Explain It

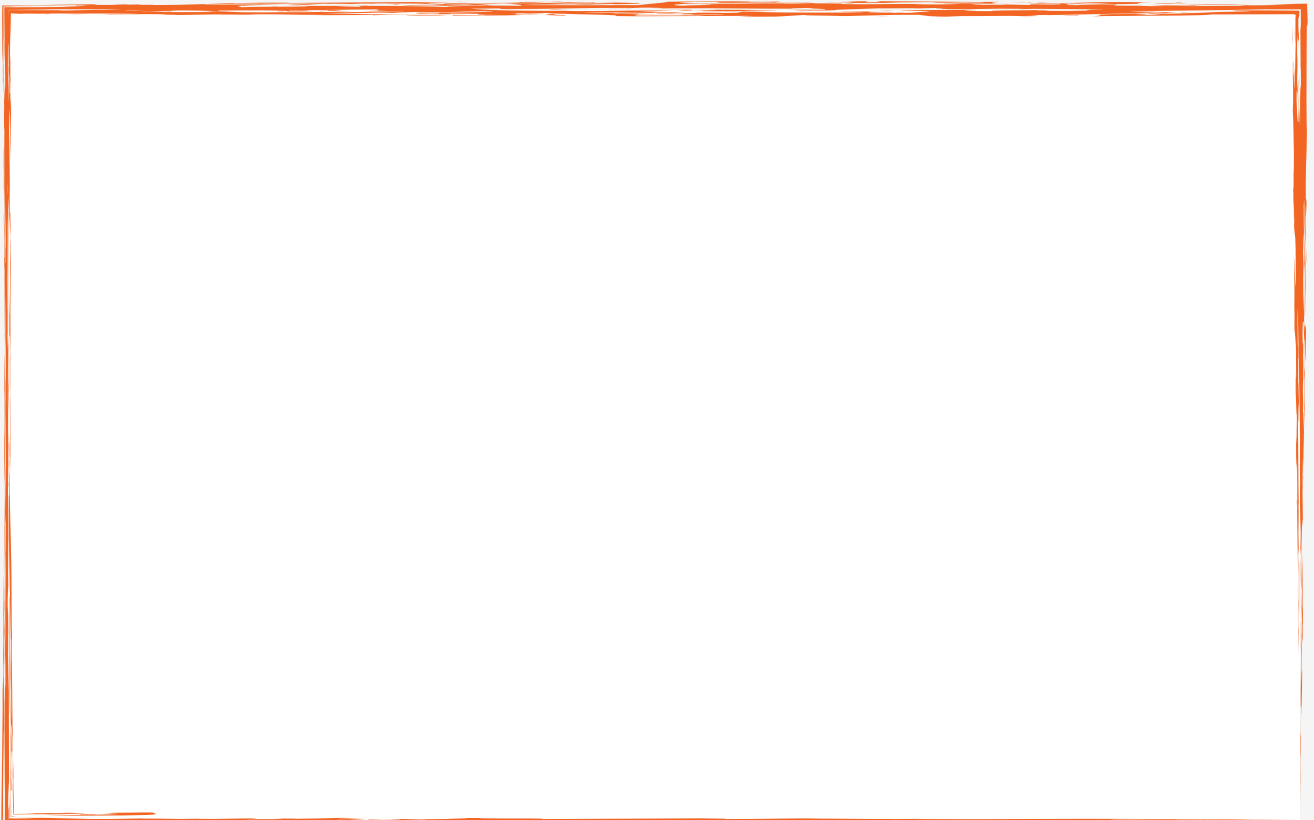
Name: _____

Date: _____

Reflection

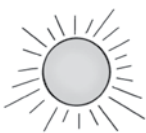
① What are two ways to count to 100?

② Use pictures, words, and numbers to explain your thinking.



Pretest

1.



The heart is _____.



- (A) next to the star
- (B) behind the box
- (C) above the smiling face
- (D) beside the smiling face

3.



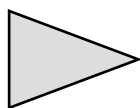
Which is **not** a solid figure?

- (A) cone
- (B) cube
- (C) sphere
- (D) hexagon

2.



Which best describes the shape shown?



- (A) cone
- (B) cylinder
- (C) triangle
- (D) rectangle

4.



Which group has more?



- (A) 
- (B) 
- (C) 
- (D) 

Name: _____ Date: _____

Performance Task 1: Shapes at School

Part A



1. Sort the shapes. Draw a picture to show your sort. Next, label and number your groups. Then, explain your sorting rule.
