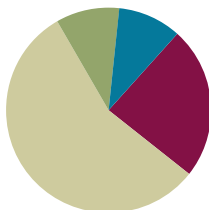


Lesson 15

Objective: Order and write numerals 4 and 5 to answer *how many* questions in categories; sort by count.

Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(28 minutes)
■ Student Debrief	(5 minutes)
Total Time	(50 minutes)



Fluency Practice (12 minutes)

- Beep Number **K.CC.4a** (4 minutes)
- Birthday Cake Number Order **K.CC.4a** (4 minutes)
- See, Count, Write Numbers to 3 **K.CC.5** (4 minutes)

Beep Number (4 minutes)

Optional Materials: (T) Personal white board (S) Number path (Lesson 15 Fluency Template) (cut out 1 number path per student)

- T: Let's play Beep Number! Listen carefully while I count. Instead of saying a number, I'll say *beep*. You can touch each number on your number path as I say it. When you know what the beep number is, raise your hand. 1, 2, beep! (Wait until all hands are raised, then give the signal.)
- S: 3!
- T: (Turn over the personal board to reveal the number 3 so that students can verify that their answer was correct.)
- T: 1, 2, 3, beep, 5! (Wait until all hands are raised, then give the signal.)
- S: 4!
- T: (Turn over the personal board to reveal the number 4.) 1, 2, 3, 4, beep! (Wait until all hands are raised, then give the signal.)
- S: 5!
- T: (Turn over the personal board to reveal the number 5.) 1, beep, 3, 4, 5. (Wait until all hands are raised, then give the signal.)
- S: 2!

Continue in a thoughtful sequence. Return to a simpler sequence if students have difficulty.

The use of the personal white board is optional, but it can increase engagement if students perceive the number as secret. Initially, students may rely heavily on the number line in order to determine the missing number. Challenge students to solve mentally when they are ready.

Birthday Cake Number Order (4 minutes)

Materials: (S) Birthday cake number order cards (Lesson 15 Fluency Template)

T: Take your cakes out of the bag. Count how many candles are on each cake. (Circulate to listen as students do this.) Show me the cake for a one-year-old baby.

S: (Hold up the cake with 1 candle.)

T: Show me the cake for a kindergartener.

S: (Hold up the cake with 5 candles.)

T: Put your cakes in order from baby's first birthday to the kindergartener's cake.

Have students mix up the cakes and repeat putting them back in order. Kindergarten admission age requirements vary, so the questions may need to be adjusted.

See, Count, Write Numbers to 3 (4 minutes)

Materials: (S) Personal white board

T: I'm going to show you some fingers. Count how many, and write the number. Show me your board when you are ready.

Start by showing fingers the Math Way (show the pinky of the right hand for 1). Then, show other fingers and other combinations.

Application Problem (5 minutes)

Draw 3 circles. Color 2 blue and 1 red. Complete the number sentence: $3 = \underline{\quad} + \underline{\quad}$.

Note: This Application Problem continues to link the previous day's lessons with the current day's lesson.

Concept Development (28 minutes)

Materials: (T) Personal white board or chart paper and sticky notes; cardboard picture frame for writing
(S) Personal white board with numeral formation practice sheet 4–5 (Lesson 15 Practice Sheet)

Display varying arrangements of groups of objects in the center of the circle. There should be two groups of 4 things and two groups of 5 things (e.g., pencils, cups, books of similar size, animals, markers, and blocks).

T: We are going to play Count, Wait, and Say How Many. Count how many there are in the group I point to. Wait for my magic snap, then say how many. (Repeat until students demonstrate fluency in counting the groups.)

T: We are going to count our groups again and make a graph on the white board to record our counting.

T: Count the erasers.

S: 1, 2, 3, 4, 5.

T: We will show how many we counted by coloring the bottom 5 squares in our eraser column. (Can use sticky notes instead, if desired.)

T: Count the keys. (Repeat procedure for keys, personal boards, and scissors.)

T: Now, we'll learn some more about how to tell how many by writing numerals 4 and 5. We will learn some new rhymes to help us. Let's start with 4: "Trace down the side; cross the middle for fun. Top to bottom, and you are done!" (Demonstrate in the writing frame while students write the numeral 4 in the air with their pointer fingers. Repeat several times.)





T: Now, let's rug write it. Pointer fingers on the rug!

T/S: (Repeat the rhyme while writing the numeral 4 with pointer fingers on the rug or another surface that will provide tactile feedback.)

T: Let's write number 5. "Trace down the side; curve like that. Back to the dot, and give it a hat!" (Demonstrate in the writing frame.) Try it with your skywriting while I show you in the frame. Say it with me. (Demonstrate several more times while students write in the air.)

T: Can you rug write it now? Pointer fingers on the rug! (Practice for several more iterations to provide tactile feedback.)

T: You're ready to try it with your markers now! Let's do some practice on our personal boards.



NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Some students may find a graph confusing. Take a poster board, and with colored tape, divide it into sections. Allow the students to place the items in the correct spaces. As children count up the number of objects, let them put the correct number card in the space so that they see how the count increases.

Send students back to their tables with their personal white boards prepared with the writing insert. Guide them through the process by having them first locate the dot, finger tracing the numeral if necessary, then having them complete the practice sheet with marker. After students have had sufficient practice with their markers, direct them to remove the sheet from their personal boards, and write with pencil.

Problem Set (10 minutes)

Students should do their personal best to complete the Problem Set within the allotted time.

Have students count the objects and write how many there are in the box.

Student Debrief (5 minutes)

Lesson Objective: Order and write numerals 4 and 5 to answer *how many* questions in categories; sort by count.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

You may choose to use any combination of the questions below to lead the discussion.

- How many objects did we count together? Look at our graph to help you remember.
- How many objects did you count in each group of the Problem Set?
- Did you count the same number as your friend?
- Practice skywriting your numbers 4 and 5, saying the rhyme, two more times.
- What is different about writing 4 and writing 5? 0 and 4? 0 and 5?







Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help you assess the students' understanding of the concepts that were presented in the lesson today and plan more effectively for future lessons. You may read the questions aloud to the students.

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 15 Problem Set K•1

Name MeL Date 4/8/13

Count and write how many. Circle a group of four of each fruit.

 4	 5
 4	 5
 4	 5

COMMON CORE Lesson 15: Order and write numerals 4 and 5 to answer how many questions in categories; sort by count. Date: 4/7/14 engage^{ny} 1.D.31

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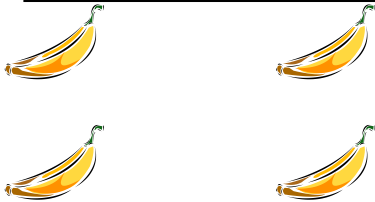
Name _____

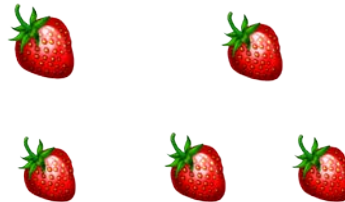
Date _____

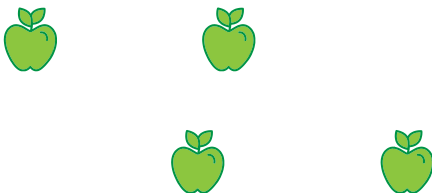
Count and write how many. Circle a group of four of each fruit.

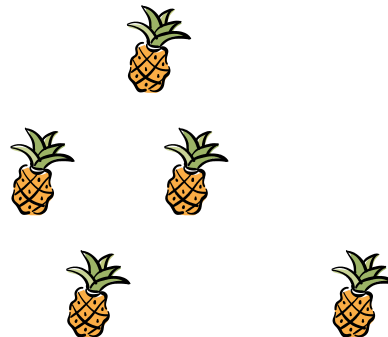








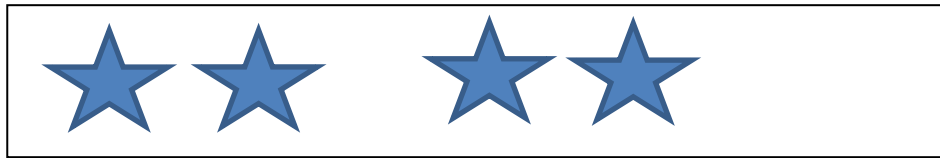




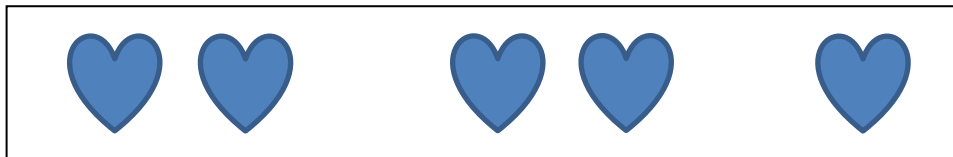
Name _____

Date _____

How many?



How many?



Are there more  or  ? Circle the shape that has more.

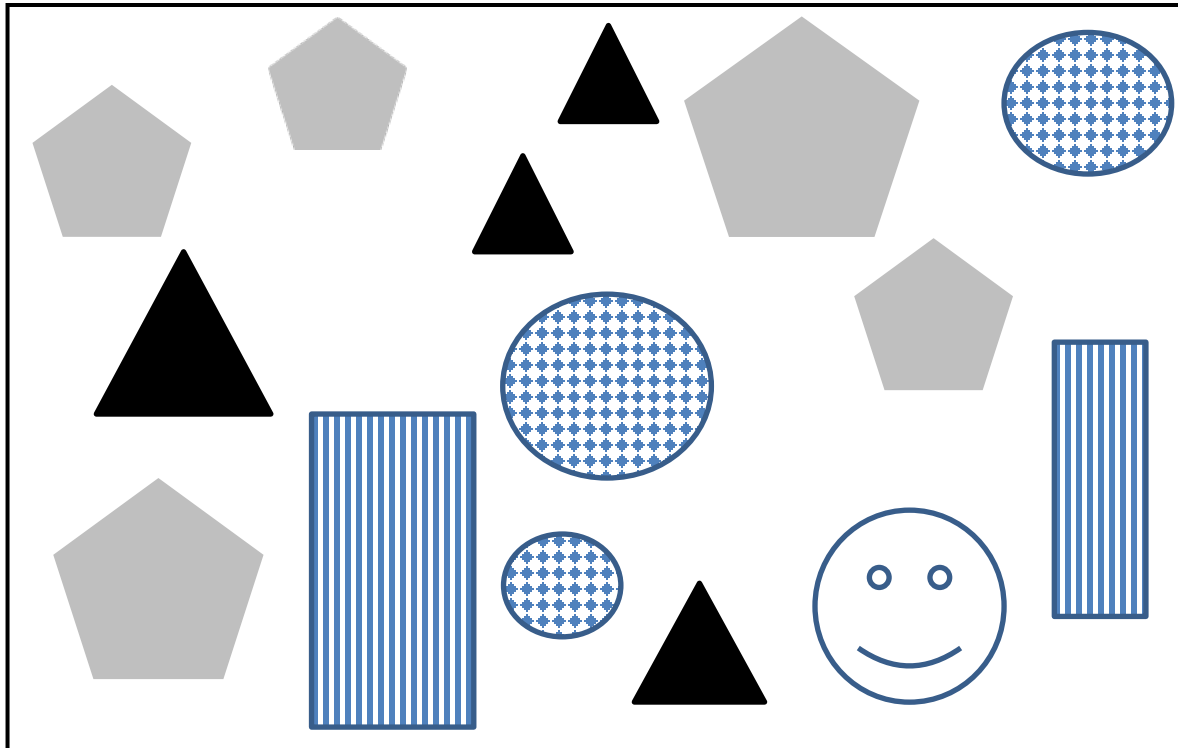
Write the missing numbers:

1, 2, 3, _____, _____

Name _____

Date _____

Count the shapes and write the numbers. Mark each shape as you count.



How many?













Write the missing numbers:

0, 1, _____, 3, _____, _____

_____, _____, 3, 2, 1, _____

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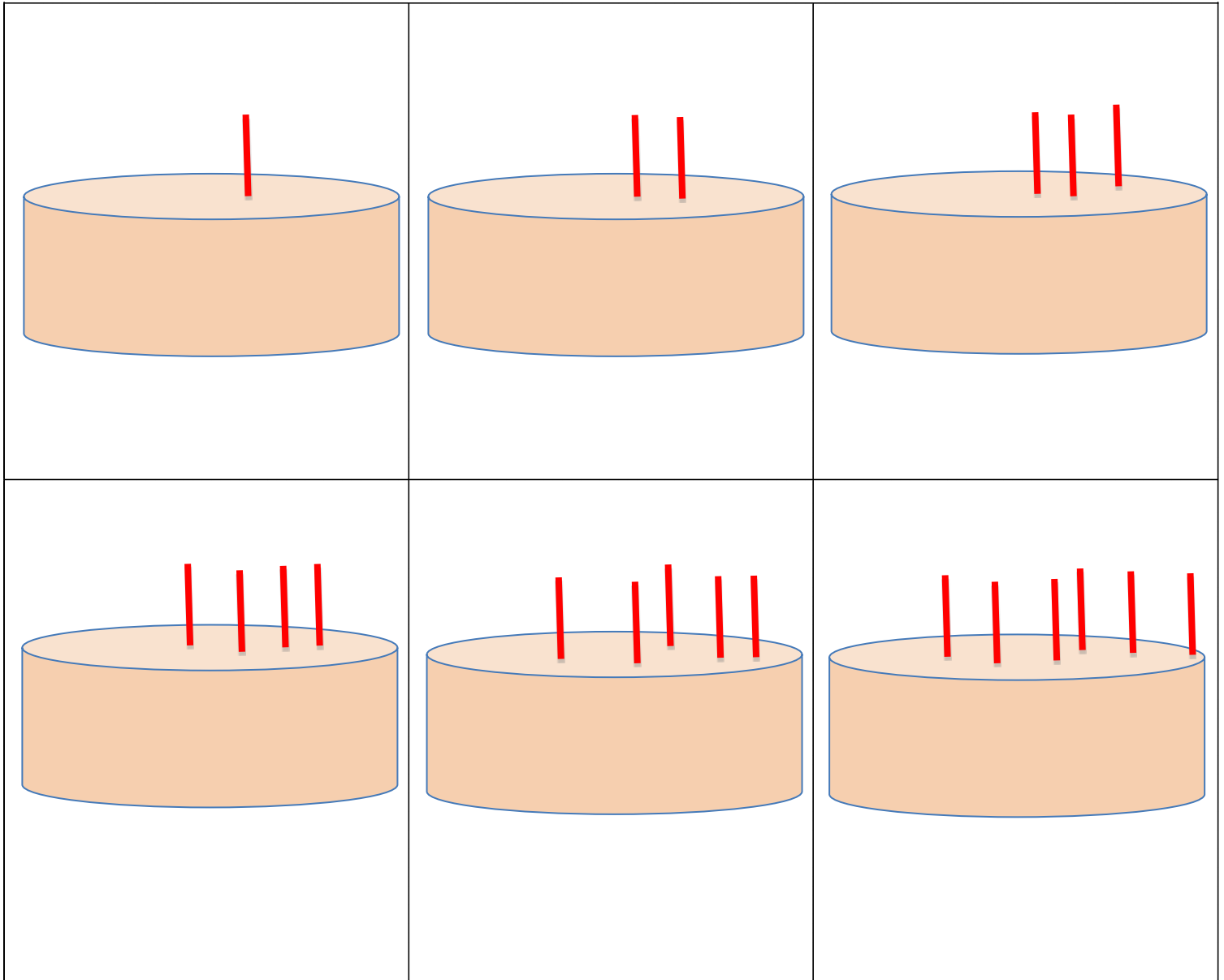
1	2	3	4	5	6	7	8	9	10
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1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

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

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

number path



birthday cake number order cards

Name _____

Date _____

Insert the template into your personal white board. Practice with your dry erase marker. When you are ready, write in pencil on the paper.





Write the missing numbers:

_____, 2, 3, _____, _____

_____, 4, 3, _____, _____

1, 2, _____, _____, _____

numeral formation practice sheet 4–5