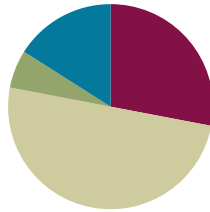


## Lesson 18

**Objective:** Count 4–6 objects in circular and scattered configurations.  
Count 6 items out of a larger set. Write numerals 1–6 in order.

### Suggested Lesson Structure

■ Fluency Practice	(14 minutes)
■ Application Problem	(3 minutes)
■ Concept Development	(25 minutes)
■ Student Debrief	(8 minutes)
<b>Total Time</b>	<b>(50 minutes)</b>



### Fluency Practice (14 minutes)

- 5-Groups in Corners (4 and 5) **K.CC.4b** (5 minutes)
- Birthday Cake Number Order **K.CC.4a** (5 minutes)
- Beep Number **K.CC.4a** (4 minutes)

### 5-Groups in Corners (4 and 5) (5 minutes)

- T: When the music starts, calmly walk around the room, visiting corners of the room until you and your classmates can make a 5-group—don't forget to count yourself! How many can be in a group?
- S: 5!
- T: So, if you go to a corner that already has 4 people there, can you stay?
- S: Yes!
- T: What if there are already 5?
- S: No.
- T: Remember to check all the corners of the room. See if we can all get into 5-groups before the music stops!

If there are not enough students to make equal groups of the designated number, supplement with puppets or stuffed animals.

**Birthday Cake Number Order (5 minutes)**

Materials: Birthday Cake (Lesson 15 Template 1)

Conduct the activity as outlined in Lesson 15, but this time have students match their numeral cards to the cakes in order to build number order and number recognition skills.

**Beep Number (4 minutes)**

Materials: (T) Personal white board (optional) (S) Number path (Lesson 15 Template 2) (optional)

Conduct the activity as outlined in Lesson 15, but this time, build incrementally to sequences beyond 5, as students exhibit mastery. A sample sequence is given below.

4, 5, beep!

4, beep, 6

Beep, 5, 6

6, 7, beep!

Continue from simple to complex, identifying the number after, the number between, and finally, the number before, which is most difficult. Then, introduce higher numbers.

Variation: Extend the sequences to four numbers, for example 7, 8, beep, 10.

Remind students to use the procedure for answering choral response questions described in Lesson 8 (listen, think, raise your hand, wait for the snap) to allow sufficient wait time.

If students are reliant on a number line for determining the missing number, challenge them to try with their eyes closed!

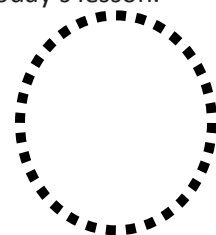
**Application Problem (3 minutes)**

Make a row of 3 dots. Make another row with 3 dots right under the first one. Count your dots. Tell your friend how many.

Note: Reviewing the array for 6 prepares students for the circular and scattered counts in today's lesson.

**Concept Development (25 minutes)**

Materials: (T) Cardboard writing frame on board (S) 1 small clear plastic bag of 10 lima beans or small counters, 1 work mat inscribed with a large circle, 1 plastic cup



T: You have beans in your bag! I wonder how many? Does anyone want to wonder with me?

S: (Responses will vary.)

T: Could you count them without taking them out of your bag?

- S: There are 10!
- T: I'd like each of you to take out 4 beans. (Pause.)  
Now, put them back in the bag. What happened to the 4 beans?
- S: They got mixed up → We can't see them!
- T: We might not be able to see them, but are they still part of the group?
- S: Yes.
- T: This time take out 4 beans and put them in your cup.  
Put your hand on top of your cup and shake them up.  
Shake harder! Pour them into the circle on your work  
mat like this. (Demonstrate.) Let's count how many  
are inside your circle.
- S: 4.
- T: Write the number 4 in the air. Now, move all of your  
beans to the edge of your circle to make a magic  
necklace. Count them again.
- S: (Count.)
- T: Are there still 4? When you are counting things on the  
necklace, how do you keep track of where you start?
- S: (Responses will vary. Allow time to discuss counting  
strategies.)
- T: Put your beans back in the bag and mix them up. Now,  
count out 5 into your cup. Shake them up and pour  
them into your circle. How many are there now?

Repeat as above, allowing students time to count both the  
scattered and circular configurations and to write the numeral  
in the air. Have students return the beans to the bag and  
repeat one more time with 6 objects.

- T: Great counting! Now, put your cups away. Watch how  
I write the number 6. Follow along with your fingers in  
the air. "Monkey's tail needs a fix! Come on, let's  
make a 6!" (Demonstrate several times. Follow by  
having children write on the rug or other surface for  
tactile practice.) You are ready to practice writing sixes  
on your boards. When you are ready, you may take  
out your practice sheet and use your pencils.  
(Distribute penmanship practice sheets to students.)



### NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Help English language learners to participate and discuss their strategies for counting their 4 circles by providing them with sentence starters such as, "I counted my beans on the circle by..." and "My strategy was to...." Giving them a place to start reduces their anxiety about using the language.



### NOTES ON MULTIPLE MEANS OF ACTION AND EXPRESSION:

Allow students with special needs to respond to the question about how they kept track of where they started when counting 4 circles on their magic necklace by showing how they counted their circles. Help by verbalizing what they did, "Oh, I see you touched each one as you counted."

MP.1

## Problem Set (5 minutes)

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

Ask students to count and write the number of dots they see in each box, and then ask if they see a pattern with the dots.

## Student Debrief (8 minutes)

**Lesson Objective:** Count 4–6 objects in circular and scattered configurations. Count 6 items out of a larger set. Write numerals 1–6 in order.

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.

- Who can explain to the class how they counted their beans and how they knew where to start and stop? Who did it the same way? Who did it a different way?
- Was it easy to count out 6 beans from your baggie? How did you do that?
- What happened to our 6 beans when we put them back in the bag with the rest of the beans?
- When you did your Problem Set, did you think it was easier to count the beans in the circle or the pencils in a line? Why?
- What is a good strategy to use when you count objects in a circle?

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 18 Problem Set K•1

Name \_\_\_\_\_ Date \_\_\_\_\_

Color 6 beans.

Color 6 beans.

Color 6 beans.

Color 6 beans.

Count the dots in each box. Write the number in the box.







•	••	•••	••••	•••••	••••••
1	2	3	4	5	6

COMMON CORE Lesson 18: Count 4–6 objects in circular and scattered configurations. Count 6 items from out of a larger set. Write numerals 1–6 in order. engage<sup>ny</sup> 1.E.16

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NYS COMMON CORE MATHEMATICS CURRICULUM 18 K•5

Worksheet continued. Count the objects. Write the number in the box.

	1
	2
	3
	4
	5
	6

COMMON CORE Lesson 18: Lesson Name EXACTLY SIXTEEN 4/3/13B:23 PIV engage<sup>ny</sup>

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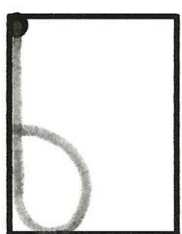
- Highlight the part–whole relationship between the beans they colored and the whole group. “The beans you colored are a part of all the beans.”
- Extension: Ask students, “If there were one more apple (shoe, pencil, star, heart) how many apples would there be?”

### 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.

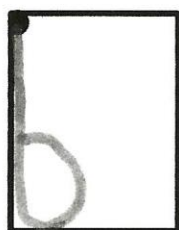
Name \_\_\_\_\_ Date \_\_\_\_\_

Insert this page into your personal whiteboards. Practice. When you are ready, write your numbers in pencil on the paper.



\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

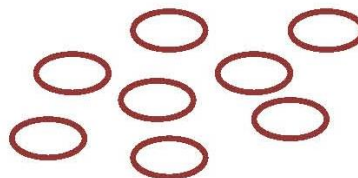
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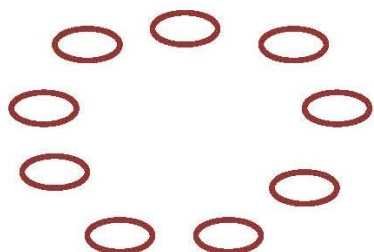
Color 6 beans.



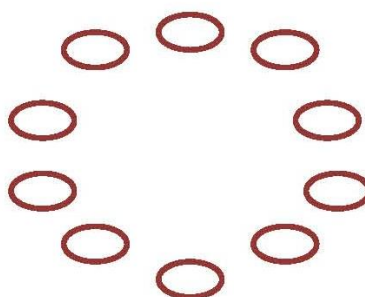
Color 6 beans.



Color 6 beans.



Color 6 beans.

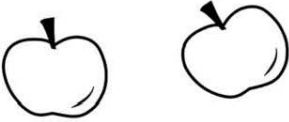



Count the dots in each box. Write the number in the box.

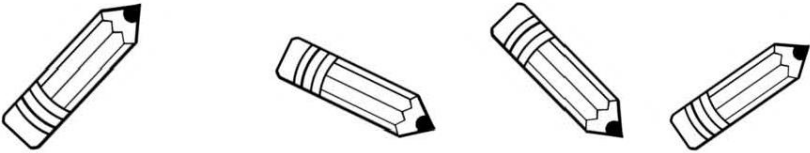
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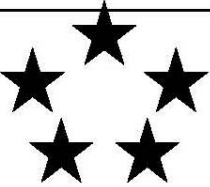
Count the objects. Write the number in the box.











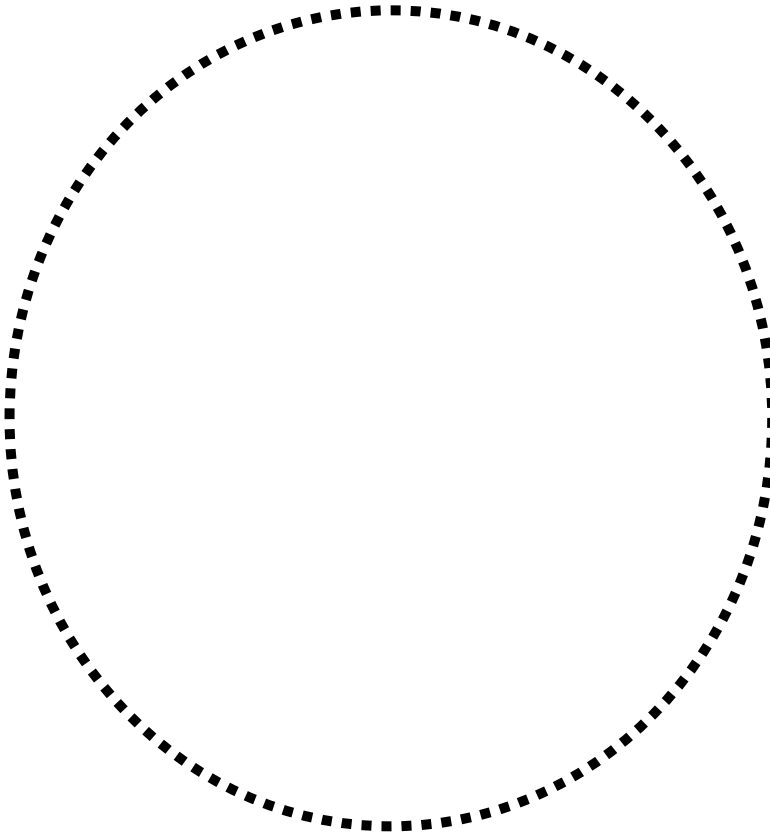




Name \_\_\_\_\_

Date \_\_\_\_\_

Draw 6 beads on this magic necklace.



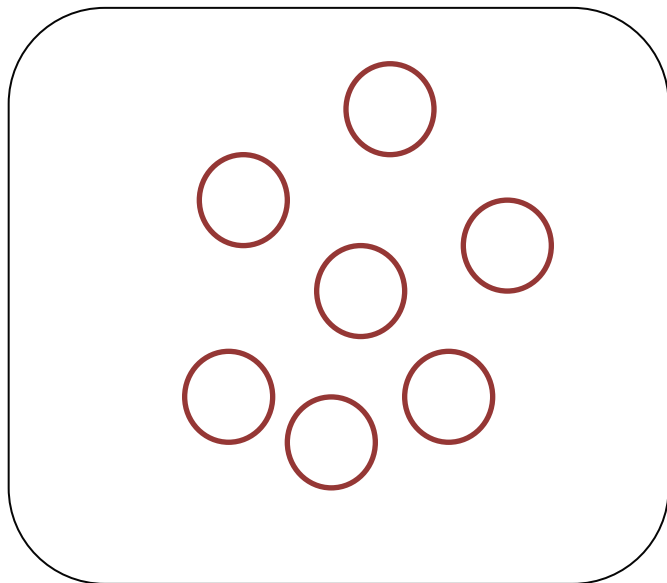
Fill in the missing numbers.

\_\_\_\_\_, 2, \_\_\_\_\_, \_\_\_\_\_, 5, \_\_\_\_\_

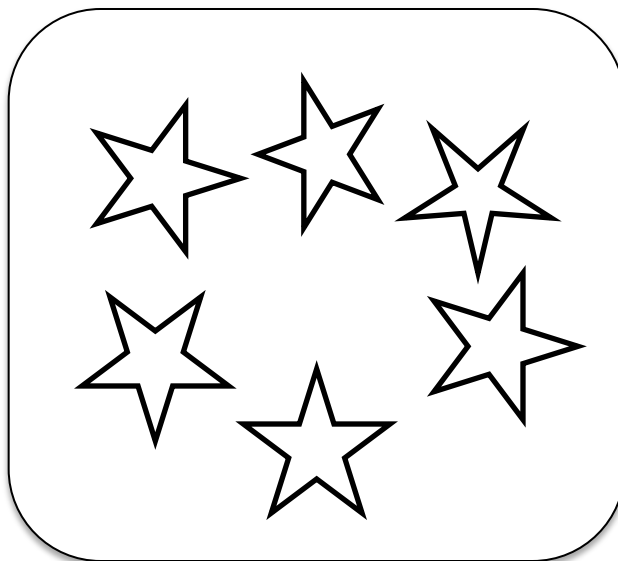
Name \_\_\_\_\_

Date \_\_\_\_\_

Color 6



Color 5

Circle 6  balloons.