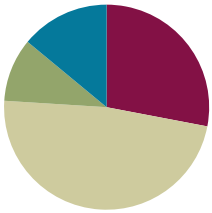
Lesson 17

Objective: Count 4–6 objects in vertical and horizontal linear configurations and array (i.e., 3 and 3, 3 twos) configurations. Match 6 objects to the numeral 6.

Related Topics: More Lesson Plans for the Common Core Math

Suggested Lesson Structure

Fluency Practice	(14 minutes)
Application Problems	(5 minutes)
Concept Development	(24 minutes)
Student Debrief	(7 minutes)
Total Time	**(50 minutes)**

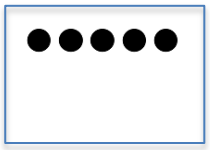


Fluency Practice (14 minutes)

- How Many Dots **K.CC.4a** (5 minutes)
- Sunrise/Sunset Counting to 10 **K.CC.2** (4 minutes)
- Birthday Candles **K.CC.4a** (5 minutes)

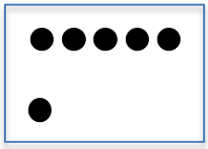
How Many Dots (5 minutes)

Materials: (T) Large 5-group cards



T: We're going to practice *listen, think, raise your hand, wait.* I'm going to show you some dots. Raise your hand when you have counted the dots, then wait for the snap to say the number. Ready? (Show the 5 card. Wait until all hands are raised, and then give the signal.)

S: 5.



T: (Show the 6 card. Wait until all hands are raised, and then give the signal.)

S: 6.

As students begin to demonstrate mastery, deviate from a predictable pattern, and challenge them to recognize the groups of dots faster.

Sunrise/Sunset Counting to 10 (4 minutes)

Note: This fluency was selected in anticipation of future lessons. Although students will not be working with numbers to 10 in this lesson, they will need to develop fluency for upcoming lessons in which students will work with numbers to 10 in depth.

Conduct activity as outlined in Lesson 7, but instruct students to plan to reach 5 as the midpoint and 10 at the highest position. Some modeling may be required initially.

Birthday Candles (5 minutes)

Conduct activity as outlined in Lesson 5, but instead of using dice, use numeral cards to build number recognition skills. Can be played with a partner or individually.

Application Problems (5 minutes)

Finish this sentence: I could eat 5 _____. Draw a picture to show your idea.

Note: This quick review exercise is included to ensure that the students properly understand the magnitude of 5 as they go forward; for example, they could not eat 5 pizzas but they could eat 5 strawberries.

Concept Development (24 minutes)

Materials: (S) Bag of 6 loose linking cubes, beans or other counters; work mat; set of number cards 1–6; two 5-group mat for each student

T: Take out your bag of linking cubes and your work mat. Count out 4 of your cubes and put them on your work mat in a straight **row**. (Demonstrate this and the other placement activities on the whiteboard as the lesson progresses.) How many cubes do you have?

S: 4!

T: (Continue to manipulate cubes, having students create rows and then **columns** of 2 each using the edges of the work mat as guides. Then have students move the cubes to the corners of the work mat and count again.) Find the number card that shows how many cubes are on your mat. Hold it up and say the number.

S: (Hold up and say 4.)

T: Take another cube out of your bag and put it on your mat. Put all of your cubes in a row across your mat and count your cubes again. How many cubes do you have?

S: 5!

T: That's right! We call this a **5-group**. (Repeat the manipulation series, having students use the edge of

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

As an aid to your English language learners, introduce the terms *row*, *column* and *corner* prior to using them in the lesson and make sure that students see the words written out with visuals representing the words, for example, a row of objects in a horizontal line and a column of objects in a vertical line.

the work mat to make a column of 5.)

T: Now you may move your cubes anywhere you like on the mat, but make sure that none of them fall off! Count your cubes. How many do you have?

S: 5.

T: Put your 5-group mat on your desk. Move your cubes to your 5-group mat. Find the number card that shows how many cubes. (Review with students the proper placement of the cubes of the 5-group mat if necessary, beginning with the dot on the upper left side.)

S: 5.

T: Put your cubes back on your work mat. Take one more cube out of your bag and put all of your cubes in a row. Let's count the cubes together.

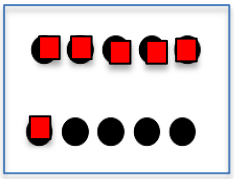
S: 1, 2, 3, 4, 5… (responses may vary) 6!

T: (Next, have students arrange their cubes into rows and then columns of 3, counting the total each time.)

T: Take one of the cubes from your work mat and put it onto your 5-group mat. Keep going until it is full. What do you notice?

S: There is one left over! They don't all fit.

T: You are right! 6 is one more than 5. Where should we put our extra cube? (Wait for responses; guide students to see that they need to use the other 5-group. Circulate to ensure proper placement of the sixth cube.) We have 5 cubes on one five and 1 on the other five. How many cubes do you have on your 5-group mat? (6.)



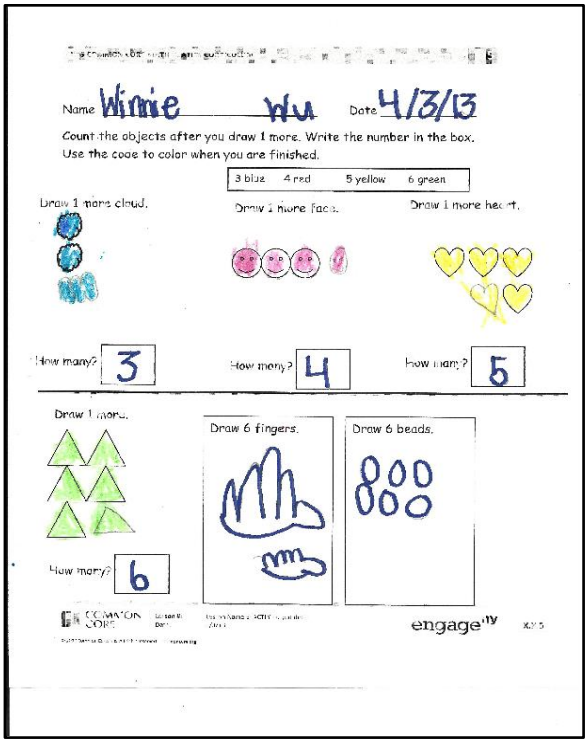
T: Yes! 5 and 1 more is 6. I am going to write the number 6 on the board. (Demonstrate.) Look through your number cards to find the number that looks like mine. How many cubes do you have? Hold the number card up and say the number. (6)

T: Great counting! Please put your materials away and get ready for your counting Problem Set.

Problem Set (8 minutes)

Students should do their personal best to complete the Problem Set within the allotted 8 minutes. For some classes, it may be appropriate to modify the assignment by specifying which problems they work on first. Some problems do not specify a method for solving. Students solve these problems using the RDW approach used for Application Problems.

Extension: On the back of the worksheet have students draw 2 (3, 4, 5, 6) in as many different ways as they can.



Student Debrief (7 minutes)

Lesson Objective: Count 4–6 objects in vertical and horizontal linear configurations and array (i.e., 3 and 3, 3 twos) configurations. Match 6 objects to the numeral 6.

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.

- Show us where you drew your objects in a line. Who did it a different way? Show us where you drew **rows**. Show us where you drew **columns**.
- How does the **5-group** help us count?
- Share with a partner how you counted and why.
- Have students discuss the different configurations.
- Look at the configurations you made on the draw 6 activity.
- How is it similar to your partner or different from your partner?

NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Have students take turns being the *leader* of a pair during their partner share and allow students with special needs to show their meaning by pointing to visuals you have set up around the room to help them explain their thinking.

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 _____

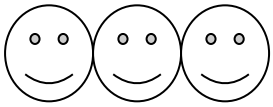
Count the objects after you draw 1 more. Write the number in the box.
Use the code to color when you are finished.

3 blue	4 red	5 yellow	6 green

Draw 1 more cloud.

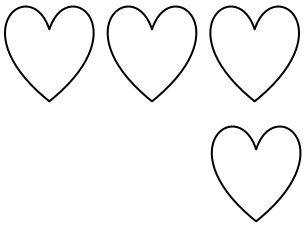
How many? ☐

Draw 1 more face.



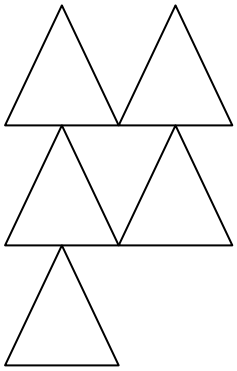
How many? ☐

Draw 1 more heart.



How many? ☐

Draw 1 more.
Then circle the number.



4 5 6

Draw 6 fingers.

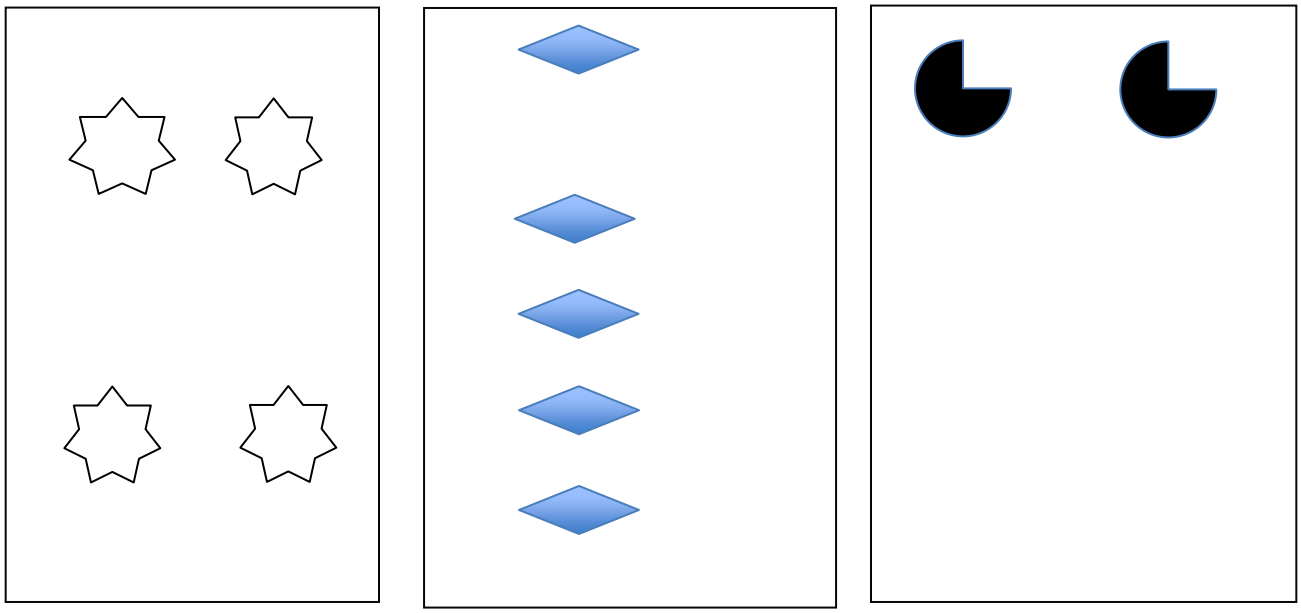
Draw 6 beads.

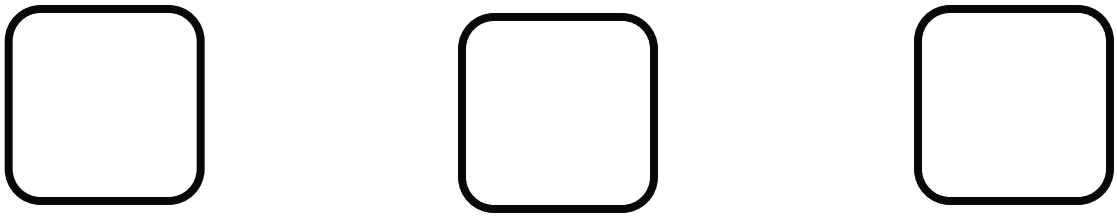
Name _____ Date _____

Fill in the missing numbers on the cards.

0	1		3		5	6

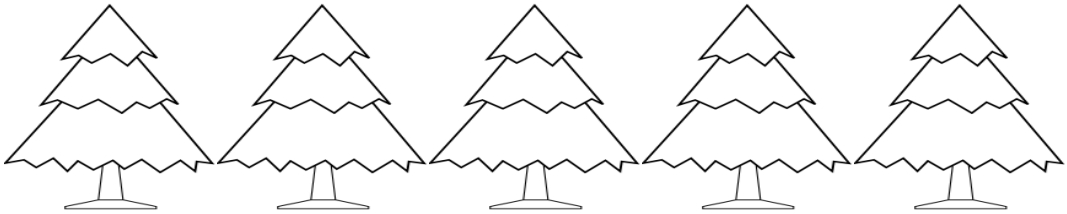
Count. Write how many in the box.



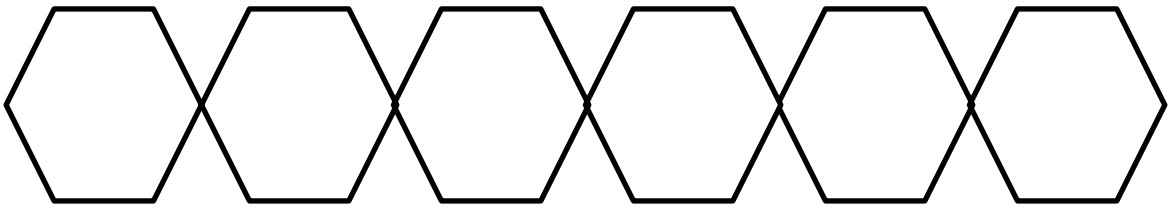


Name _____ Date _____

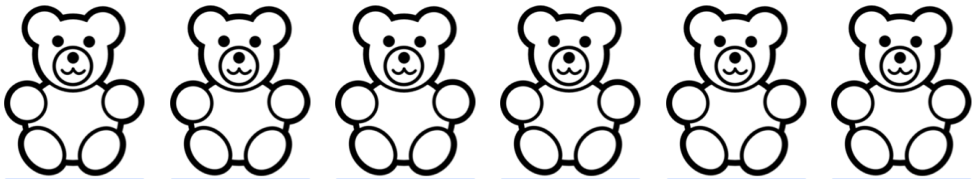
Color 4.



Color 5.



Color 6.



Connect the boxes with the same number.