Lesson 20

Objective: Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"

Suggested Lesson Structure

- Fluency Practice (12 minutes)
- Application Problem (5 minutes)
- Concept Development (25 minutes)
- Student Debrief (8 minutes)
- **Total Time**



Fluency Practice (12 minutes)

	Making 3 with Triangles and Beans K.CC.4a	(4 minutes)
•	Hands Number Line to 7 K.CC.4a	(4 minutes)
	Show Me Another Way K.CC.4a	(4 minutes)

(50 minutes)

Making 3 with Triangles and Beans (4 minutes)

Materials: (S) 3 beans, paper or foam triangle, personal white board

Conduct the activity as laid out in Lesson 11, but now have students write the equations on their personal white boards. Challenge students to list all possible combinations.

Hands Number Line to 7 (4 minutes)

Materials: (S) Two hands mat (Lesson 19 Fluency Template), bag of beans painted red on one side

Conduct the activity as outlined in Lesson 2, but now extend the number line to the right hand to show 6 and 7. Show 6 as a full left hand and the thumb of the right hand so that students can see the number line progressing across their hands.

Show Me Another Way (4 minutes)

Conduct the activity as laid out in Lesson 6, but now include showing different ways to make 6 and 7.



Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



Application Problem (5 minutes)

Christopher has a bag of 5 cookies and 2 other loose cookies. Draw the cookies. How many cookies does Christopher have? Count the cookies with your partner. Then, circle the bag of 5 cookies.

Note: Reinforcing the idea of 7 as 5 and 2 will benefit students as they count sevens in varying configurations in today's lesson.

Concept Development (25 minutes)

- Materials: (T) Cardboard writing frame on board (S) Bag of 10 counters (objects should vary from student to student), work mat inscribed with a large circle, plastic cup, personal white board with numeral formation practice sheet 7 (Lesson 20 Practice Sheet)
 - T: Take out 5 of your counters, and then count out 2 more. How many are left in your bag?
 - S: 3.
 - T: Put your counters in your plastic cup. Shake them up seven times, and pour them into the circle on your work mat. (Demonstrate.) Use your finger to make a counting path through your objects while you count them. How many are there?
 - S: 7.
 - T: Look at your friend's work mat. Does her 7 look exactly like yours? Show each other how you counted. Did you make the same counting path?
 - S: (Responses will vary. Allow time for sharing and discussion.)
 - T: Now, put your counters around the edge of the circle to make a magic necklace. Count them again. How many?

NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Scaffold the Application Problem for English language learners by modeling the word more. For example, have students show 1 more linking cube and say "1 linking cube"; then, show another linking cube and say "1 more" as the teacher makes a tower with a second linking cube. Add the word more to the class word wall with an appropriate visual.



to the next:

Assist special needs students during the activity by breaking down the steps for them and watching them accomplish each step before moving on

- Let's count 5 of your counters: 1, 2, 3, 4, 5. Good.
- Put the counters in the plastic cup.
- Let's count 2 more: 1, 2. Good.
- Now, put those 2 counters in the cup.
- Let's count everything together.

- S: 7.
- T: Show your friend how you counted. Did you count them the same way? (Again, allow time for sharing and discussion.)
- T: Put 2 of your counters back in the bag. Now, put 5 counters back in the bag. How many counters did you put away?
- S: 7.



Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



204

This work is licensed under a

T: Show me 7 with your fingers. (Check to ensure understanding.) We are going to practice writing the number 7. Watch me make 7 on the board. Follow along with your fingers in the air. "A straight line and down from heaven; that's the way we make a 7." (Demonstrate several times, followed by having children write on the rug or other surface for tactile practice.) You are ready to practice writing on your personal white boards. When you are ready, you may take out your practice sheet and use your pencils. (Distribute personal white boards to students. When the penmanship practice is complete, distribute the Problem Set.)

Problem Set (8 minutes)

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

Guide students to connect the dots they colored as they count to 7.



Student Debrief (8 minutes)

Lesson Objective: Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"

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 their 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.

Any combination of the questions below may be used to lead the discussion. Have students bring the Problem Set to the rug to discuss.

- Ask your partner about the similarities and differences between the groups of 7 beans that you both colored.
- What did you notice when you were counting the dots and writing the numbers? (The numbers got bigger. There was no 1.)
- Compare your counting paths as you connected the dots in the scattered formations. (Students are remembering their path, reconstructing their count. This develops their skill of counting while beginning with numbers other than 1.)



MP.4

Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



205

This work is licensed under a



Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students' understanding of the concepts that were presented in today's lesson and planning more effectively for future lessons. The questions may be read aloud to the students.



Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"





Name

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



numeral formation practice sheet 7



Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



207

This work is licensed under a

Date _____ Name

Color 7 beans. Draw a line to connect the dots you colored.



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

••	•••	$\bullet \bullet \bullet \bullet$	••••	••••	

Lesson 20:

EUREKA

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"

engage

Name _____

Date_____

Make a necklace. Draw 7 beads around the circle.





EUREKA MATH Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



Date _____ Name _____

How many? Write the number in the box.





Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



Count how many. Write the number in the box. Draw a line to show how you counted the suns.



Count how many. Write the number in the box. Draw a line to show how you counted the circles.



EUREKA MATH Lesson 20:

Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, "How is your seven different from mine?"



BY-NC-SA Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.