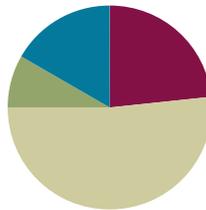


Lesson 8

Objective: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart.

Suggested Lesson Structure

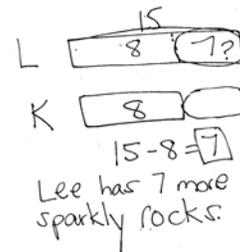
■ Application Problem	(5 minutes)
■ Fluency Practice	(14 minutes)
■ Concept Development	(31 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)



Application Problem (5 minutes)

Lee found 15 sparkly rocks. Kim found 8 sparkly rocks. How many more sparkly rocks did Lee find than Kim?

Note: Today’s Application Problem is a *compare with difference unknown* problem type. For students who are successful with solving this problem when the term *more* is used, consider adjusting the question to ask how many *fewer* sparkly rocks Kim found. By asking both questions, the teacher can help students recognize that the same solution sentence can be used with either question.



Fluency Practice (14 minutes)

- Grade 1 Core Fluency Sprint **1.OA.6** (10 minutes)
- 1 More, 1 Less, 10 More, 10 Less **1.OA.5, 1.NBT.5** (4 minutes)

Grade 1 Core Fluency Sprint (10 minutes)

Materials: (S) Core Fluency Sprints (Lesson 3)

Note: Based on the needs of the class, select a Sprint from yesterday’s materials. There are several possible options available.

- Re-administer the Sprint from the day before.
- Administer the next Sprint in the sequence.
- Differentiate. Administer two different Sprints. Simply have one group do a counting activity on the back of the Sprint while the other Sprint is corrected.

Today, between Sides A and B of the Sprint, practice counting the Say Ten way from 88 to 99 and back.

1 More, 1 Less, 10 More, 10 Less (4 minutes)

Materials: (T) Vertical counting sequence (Lesson 7 Template)

Note: This fluency activity reviews the grade-level standard of mentally finding 10 more or 10 less than a number without having to count.

Display the vertical counting sequence chart for reference.

- T: Say the number that is 1 more. 5. (Pause, and then snap.)
 S: 6.
 T: 15. (Pause, and then snap.)
 S: 16.

Continue with the following suggested sequence, as time permits: 55, 75, 105, 115; 67, 97, 107; 9, 49, 99, 109, 119.

Repeat for 10 more:

10, 40, 90, 100

3, 23, 63

56, 86, 96

Repeat for 10 less:

20, 50, 70

45, 65, 95

88, 118, 108

Repeat for 1 less:

4, 14, 84

8, 38, 88

10, 70, 120



**NOTES ON
MULTIPLE MEANS
OF REPRESENTATION:**

Some students may need practice writing the number after they mentally find 1 or 10 more or less. As an alternative for certain students, have them write the numbers instead of saying them.

Concept Development (31 minutes)

Materials: (T) 100-bead Rekenrek and 20-bead Rekenrek (if available), place value chart (Lesson 3 Template 2), personal white board, document camera (S) Place value chart (Lesson 3 Template 2), personal white board

Note: If the 20-bead Rekenrek is not available, draw two rows of large dots (5 white and 5 red in each row) on chart paper to represent two more rows of beads. Along with the bead sets, put the place value chart in a personal white board under the document camera, or put an image of the place value chart on an interactive board.

Gather students in the meeting area for today's lesson.

- T: You did a great job with counting the Say Ten way between the two Sprints today. Let's count by tens the Say Ten way. (Move the beads over on the Rekenrek as students count.)
 S: 1 ten, 2 tens, 3 tens, ..., 9 tens, 10 tens.
 T: (Write 10 in the tens position on the place value chart.) Since we were only counting tens, there are no additional ones, just 10 tens. (Write 0 in the ones position on the place value chart.)
 T: 10 tens is the same as ...?
 S: 100.

- T: What if I add 1 more bead? (Hold up the 20-bead Rekenrek, and slide 1 bead over.) Do I still have 10 tens?
- S: Yes!
- T: But I also have...?
- S: 1 one.
- T: I need a volunteer to change our place value chart to show 10 tens and 1 one. (Select a student, and wait as she erases 0 in the ones position and writes 1.)
- T: 10 tens 1 one is...?
- S: 101. (Some students may say one hundred *and* one. If they do, explain that $100 + 1$ describes 100 *and* 1, but the *name* of the number is one hundred one. This is similar to naming other numbers, such as 25. Twenty *and* 5 is written $20 + 5$. To say the number, we say twenty-five.)
- T: We had 10 tens and then 10 tens 1. Next, we would have...? (Move another bead on the 20-bead Rekenrek.)
- S: 10 tens 2.
- T: Let's change our place value charts to record the tens and ones.
- T: 10 tens 2 is the same as...?
- S: 102.
- T: Let's see. 100, 101, 102. Next would be...? (Slide a third bead.)
- S: 103.
- T: How many tens and ones are in 103? Let's change our place value charts to record the tens and ones.
- T: Let's count together starting at 98. Listen for when I say to stop.
- S/T: (Count together without the Rekenrek.) 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109.
- T: Stop!
- T: How many tens and ones are in 109? Talk with a partner. Let's show that many on the Rekenrek, and record it on your place value chart. (Circulate and notice students' recordings.)
- T: Let's look at the Rekenrek. It shows how many tens?
- S: 10 tens!
- T: It shows how many additional ones?
- S: 9 ones!
- T: What if we slide over one more bead? How many tens would we have then?
- S: 11 tens!
- T: (Slide over one more bead so that the Rekenreks now show 11 tens.) Write this amount on your place value chart. Tell your partner what number has 11 tens. (Wait as students complete the task.)
- T: 11 tens is the same as...?
- S: One hundred ten!



NOTES ON MULTIPLE MEANS OF REPRESENTATION:

If some students need more support, have them look at the Rekenreks as they count. This visual support will help them to identify the number of tens and then the number of additional ones.

Repeat the process, having students count from a given number and stop at a given number. Students identify the number in both its traditional form and its unit form. A suggested sequence would be 97 to 103, 108 to 112, and 108 to 120. Alternate between saying numbers the regular way and the Say Ten way. If students need more practice, the following partner activity may be used.

- Partner A uses quick tens and ones to draw a number between or including 100 and 120.
- Partner B records the number in the place value chart while Partner A writes the number below his drawing.
- The two partners check that they have matching numbers and then switch roles to start again.

Problem Set (10 minutes)

Students should do their personal best to complete the Problem Set within the allotted 10 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 should solve these problems using the RDW approach used for Application Problems.

Student Debrief (10 minutes)

Lesson Objective: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart.

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.

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 8 Problem Set 1•6

Name Maria Date _____

1. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 74	tens ones 7 4	b. 78	tens ones 7 8
c. <u>91</u>	tens ones 9 1	d. <u>109</u>	tens ones 10 9
e. 116	tens ones 11 6	f. 103	tens ones 10 3
g. <u>112</u>	tens ones 11 2	h. <u>120</u>	tens ones 12 0
i. <u>105</u>	tens ones 10 5	j. 102	tens ones 10 2

COMMON CORE Lesson 8: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart. engage^{ny} 6.8.8

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 8 Problem Set 1•6

2. Match.

a. tens ones 9 7	●	10 tens 5 ones
b. tens ones 10 7	●	10 tens 7 ones
c. tens ones 11 0	●	9 tens 7 ones
d. tens ones 10 5	●	12 tens 0 ones
e. tens ones 10 1	●	110
f. tens ones 12 0	●	11 tens 8 ones
g. tens ones 11 8	●	101

COMMON CORE Lesson 8: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart. engage^{ny} 6.8.9

Any combination of the questions below may be used to lead the discussion.

- Look at Problem 1(d). What similarities and differences do you notice between reading a number and seeing the number in tens and ones?
- Look at Problem 2. Which matches were easy to identify, and which were more challenging? Explain why this was so.
- Choose a number from Problem 1. What is another way you could show this number in unit form? (This question is best used if students have been highly successful with today's lesson.)
- How can counting the Say Ten way help you with numbers from 100 to 120?
- Look at your Application Problem. Share your strategies for solving the problem.

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.

Name _____

Date _____

1. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 74

tens	ones

b. 78

tens	ones

c. _____

tens	ones
9	1

d. _____

tens	ones
10	9

e. 116

tens	ones

f. 103

tens	ones

g. _____

tens	ones
11	2

h. _____

tens	ones
12	0

i. _____

tens	ones
10	5

j. 102

tens	ones

2. Match.

a.

tens	ones
9	7

● 10 tens 5 ones

b.

tens	ones
10	7

● 10 tens 7 ones

c.

tens	ones
11	0

● 9 tens 7 ones

d.

tens	ones
10	5

● 12 tens 0 ones

e.

tens	ones
10	1

● 110

f.

tens	ones
12	0

● 11 tens 8 ones

g.

tens	ones
11	8

● 101

Name _____

Date _____

1. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 83

tens	ones

b. _____

tens	ones
9	4

c. _____

tens	ones
11	5

d. 106

tens	ones

2. Write the number.

a. 10 tens 2 ones is the number _____.

b. 11 tens 4 ones is the number _____.

Name _____

Date _____

1. Write the number as tens and ones in the place value chart, or use the place value chart to write the number.

a. 81

tens	ones

b. 98

tens	ones

c. _____

tens	ones
11	7

d. _____

tens	ones
10	8

e. 104

tens	ones

f. 111

tens	ones

2. Write the number.

a. 9 tens 2 ones is the number _____.	b. 8 tens 4 ones is the number _____.
c. 11 tens 3 ones is the number _____.	d. 10 tens 9 ones is the number _____.
e. 10 tens 1 ones is the number _____.	f. 11 tens 6 ones is the number _____.

3. Match.

a.

tens	ones
10	2



11 tens 4 ones

b.

tens	ones
9	5



9 tens 5 ones

c.

tens	ones
11	4



11 tens 8 ones

d.

tens	ones
11	0



11 tens 0 ones

e.

tens	ones
10	8



102

f.

tens	ones
10	0



10 tens 0 ones

g.

tens	ones
11	8



108