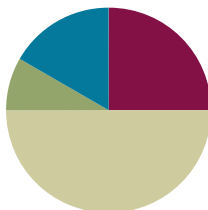


Lesson 7

Objective: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120.

Suggested Lesson Structure

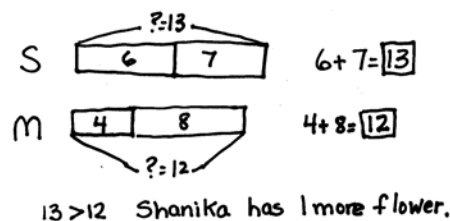
■ Application Problem	(5 minutes)
■ Fluency Practice	(15 minutes)
■ Concept Development	(30 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)



Application Problem (5 minutes)

Shanika has 6 roses and 7 tulips in a vase. Maria has 4 roses and 8 tulips in a vase. Who has more flowers? How many more flowers does she have?

Note: Today's problem embeds an opportunity for comparison. Students continue to practice adding across ten, which supports their work in Topic C.



Fluency Practice (15 minutes)

- Grade 1 Core Fluency Sprint **1.OA.6** (10 minutes)
- True or False Number Sentences **1.OA.6, 1.OA.7** (5 minutes)

Grade 1 Core Fluency Sprint (10 minutes)

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

Note: Choose an appropriate Sprint based on the needs of the class. As students work, pay attention to their strategies and the number of problems they answer. Today, between Sides A and B of the Sprint, practice counting the Say Ten way up and down from 67 to 77.

Core Fluency Sprint List:

- Core Addition Sprint 1 (targeting core addition and missing addends)
- Core Addition Sprint 2 (targeting the most challenging addition within 10 and beyond 10)
- Core Subtraction Sprint (targeting core subtraction)

- Core Fluency Sprint: Totals of 5, 6, and 7 (developing understanding of the relationship between addition and subtraction)
- Core Fluency Sprint: Totals of 8, 9, and 10 (developing understanding of the relationship between addition and subtraction)

True or False Number Sentences (5 minutes)

Materials: (T/S) Personal white board

Note: This activity reviews Lesson 6.

Review the symbols $=$, $>$, and $<$. Write true and false number sentences using the symbols. Signal, and then wait for students to say whether the number sentence is true or false. Choose a student who answered correctly to prove it.

Use the first two columns as the suggested sequence. At each checkpoint, decide whether students are ready for the next column or if they should continue with similar problem types. The third column is provided as a possible opportunity for a few students who would really enjoy a challenge.

- | | | |
|--------------|--|------------------------|
| a. $5 > 4$ | e. $30 + 5 = 35$ | i. $9 + 8 = 10 + 7$ |
| b. $50 > 40$ | f. $53 = 5 + 30$ | j. $15 + 10 = 25 - 10$ |
| c. $45 > 54$ | g. $73 < 7 \text{ tens } 3 \text{ ones}$ | k. $14 - 7 > 9$ |
| d. $15 < 41$ | h. $94 > 9 \text{ ones } 3 \text{ tens}$ | l. $80 < 79 + 1$ |
| Checkpoint. | Checkpoint. | |

Concept Development (30 minutes)

Materials: (T) Vertical counting sequence (Template), Hide Zero cards (Lesson 3 Template 1) (S) Hide Zero cards (optional)

Have students sit at their desks at the start of the lesson. If students are using Hide Zero cards, distribute cards up to 9 tens. Hold students' 10 tens card until later in the lesson. The 11 tens and 12 tens cards are not needed for today's lesson.

- T: (Project the vertical counting sequence template, preferably on an interactive board or easel paper.) This chart shows numbers from 1 through 77. Can you help me write more numbers until we fill up all of the empty spaces?
- S: (Write the numbers on the chart as students count.) 78, 79, 80, 81, 82, ..., 100.
- T: We have more spaces on the chart. Who knows what number comes after 100?
- S: One hundred one.
- T: Yes. One hundred one (101), one hundred two (102), ... 120. (Be sure to read the number without saying *and* between one hundred and the ones place unit.)
- T: These last two columns look a little like other columns on the chart. Does anyone see what I see?
- S: The first two columns have most of the same digits.

- T: Let's look more closely at these columns. (If using an interactive board, highlight numbers 1 through 20 and numbers 101 through 120.) Talk with a partner about what you notice. (Circulate and listen as students discuss.)
- S: I notice that there is a 1, 2, 3, 4, ... all the way to 20 at the beginning of this chart and at the end of this chart. → The pattern goes to 100 and starts over again, but you can't forget to include 100 each time as you say the new numbers. → Once you get to 100, the numbers start over again, only this time you say 100 first. So instead of 1, 2, 3, 4, it's 101, 102, 103, and 104.
- T: Let's try this again with Hide Zero cards and see if we can tell what's happening. I'm going to give you a new Hide Zero card. This one has 10 tens. (Distribute 10 tens card.)
- T: When we get to 100, the next number is...?
- S: 101.
- T: Point to the ones place on your hundred card.
- S: (Students point.)
- T: Place one on top of your 100 card in the ones place. What number did you make?
- S: One hundred one!
- T: Yes! It looks like a zero sandwich with the ones as the bread. What number is that again?
- S: One hundred one!
- T: Now, let's add another one. 100, 101, ...?
- S: 102.
- T: Which card did you need to show 102?
- S: Our 100 card and a 2.

MP.4

Repeat this process until the class reaches 120. Then, as a class, count down either verbally as the teacher points to the numbers on the chart displayed or as students create the numbers with their Hide Zero cards, until reaching 88.

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.



NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

Challenge students who seem confident with this skill to start at 120 and complete their chart by counting back.



NOTES ON MULTIPLE MEANS OF ENGAGEMENT:

If students have trouble completing the Problem Set because they do not know their numbers to 120, give them a vertical counting sequence to reference as they complete the problems.

Student Debrief (10 minutes)

Lesson Objective: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120.

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.

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

- Look at Problem 1. What are some patterns you notice in the chart?
- Look at Problem 4. Which sequences were the quickest for you to solve? Why? Which sequences were trickier? On your personal white board, create a really tricky problem for your partner. What did you do to make it tricky to solve? What strategies might you use to solve it correctly?
- Share the progress you have made with your work with Sprints. Tell us about the math accomplishments you are proud of.
- 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.

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 7 Problem Set 1•6

Name: Maria Date: _____

1. Fill in the missing numbers in the chart up to 120.

a.	b.	c.	d.	e.
71	81	91	101	111
72	82	92	102	112
73	83	93	103	113
74	84	94	104	114
75	85	95	105	115
76	86	96	106	116
77	87	97	107	117
78	88	98	108	118
79	89	99	109	119
80	90	100	110	120

COMMON CORE Lesson 7: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120. engage^{ny} 6.8.54
Date: 10/19/14

NYS COMMON CORE MATHEMATICS CURRICULUM Lesson 7 Problem Set 1•6

2. Write the numbers to continue the counting sequence to 120.

96, 97, 98, 99, 100, 101, 102,
103, 104, 105, 106, 107, 108,
109, 110, 111, 112, 113, 114,
115, 116, 117, 118, 119, 120

3. Circle the sequence that is incorrect. Rewrite it correctly on the line.

a. 107, 108, 109, 110, 120 b. 99, 100, 101, 102, 103

107, 108, 109, 110, 111

4. Fill in the missing numbers in the sequence.

a. 115, 116, 117, 118, 119 b. 116, 117, 118, 119, 120

c. 100, 101, 102, 103, 104 d. 97, 98, 99, 100, 101, 102

COMMON CORE Lesson 7: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120. engage^{ny} 6.8.55
Date: 10/19/14

Name _____

Date _____

1. Fill in the missing numbers in the chart up to 120.

a.	b.	c.	d.	e.
71	81	91		111
	82		102	
73	83	93		113
	84	94	104	114
76	86	96	106	116
77	87	97		117
79	89	99	109	119
80		100	110	

2. Write the numbers to continue the counting sequence to 120.

96, 97, _____, _____, _____, _____, _____,
_____, _____, _____, _____, _____, _____,
_____, _____, _____, _____, _____, _____,
_____, _____, _____, _____, _____, _____

3. Circle the sequence that is incorrect. Rewrite it correctly on the line.

a.

107, 108, 109, 110, 120

b.

99, 100, 101, 102, 103

4. Fill in the missing numbers in the sequence.

a.

115, 116, _____, _____, _____

b.

_____, _____, 118, _____, 120

c.

100, 101, _____, _____, 104

d.

97, 98, _____, _____, _____, _____

Name _____

Date _____

1. Complete the chart by filling in the missing numbers.

a.

88
90

b.

99

c.

108

d.

119

2. Fill in the missing numbers to continue the counting sequence.

a.

117, _____, 119, _____

b.

108, 109, _____, _____, _____

Name _____

Date _____

1. Fill in the missing numbers in the chart up to 120.

a.

b.

c.

d.

e.

71		91		111
	82		102	
		93		
74				114
	85		105	
		96		116
	87			
			108	
79		99		119
80	90		110	

2. Write the numbers to continue the counting sequence to 120.

99, _____, 101, _____, _____, _____, _____, _____,
_____, _____, _____, _____, _____, _____, _____,
_____, _____, _____, _____, _____, _____

3. Circle the sequence that is incorrect. Rewrite it correctly on the line.

a.

116, 117, 118, 119, 120

b.

96, 97, 98, 99, 100, 110

4. Fill in the missing numbers in the sequence.

a.

113, 114, _____, _____, _____

b.

_____, _____, _____, 120

c.

102, _____, _____, _____

d.

88, 89, _____, _____, _____, _____

1	11	21	31	41	51	61	71	81	91	101	111
2	12	22	32	42	52	62	72	82	92	102	112
3	13	23	33	43	53	63	73	83	93	103	113
4	14	24	34	44	54	64	74	84	94	104	114
5	15	25	35	45	55	65	75	85	95	105	115
6	16	26	36	46	56	66	76	86	96	106	116
7	17	27	37	47	57	67	77	87	97	107	117
8	18	28	38	48	58	68	78	88	98	108	118
9	19	29	39	49	59	69	79	89	99	109	119
10	20	30	40	50	60	70	80	90	100	110	120

vertical counting sequence