Grade 2	Lesson: 7-2 Finding Parts of 100	Reference to English
Math Standard(s): 2.NBT.5 (also 2.NBT.9)	**Domain: Numbers and Operations in Base Ten**	

Content Objective(s):	Language Objective(s):
Students will find the missing part of 100 by counting up from the given part. *I can find the missing part of 100 by count up from the given part.*	Students will explain the order they use to find parts of 100. *I can explain how to find parts of 100.*

Essential Understanding:	Required Academic Vocabulary for Word Wall:
To find parts of 100, add on ones to make a ten and count on by tens to reach 100.	**Listen:** **Read:** **Write:** **Speak:** **Sentence Frame:**

Materials:	Additional Lesson Vocabulary:
• 10 Little Ten-Frames for each student (Teaching Tool 7) • Whiteboards, erasers and markers • Subtracting Ten Page (page 191) • Guided Practice (Page 192)	puzzle, ten-frames, pieces

Lesson:	Instructional Time: 30 – 35 minutes

Opening: (3 minutes)
T: "You have learned to find missing parts of numbers. Today, you will find missing parts of 100."
• Write 4 + ___ = 10 on the board.
T: "Look at the problem on the board. What is the missing number? Tell your neighbor."
S: *will tell their neighbor, "6."*
T: "Show me with your fingers, what is the missing number."
S: *will show 6 with their fingers.*
T: "So, 4 plus 6 equals 10. How did you find that? Did you start with 10 and subtract 4? That is what I would do. 10 take away 4 (show ten fingers and put 4 down) **equals 6. 1,2,3,4,5,6 fingers."**
• Write 40 + ___ = 100 on the board.
T: "Just as you added 6 ones and 4 ones to make ten. You can also add 6 tens and 4 tens to make 10 tens or 100. Look at the problem on the board. What is the missing part? Tell your neighbor."
S: *will tell their neighbor, "60" or "6 tens."*
T: "Let me write it on the board. 40 plus what equals 100?"
S: *will say, "60" or "6 tens."*
T: "Yes, 40 + 60 = 100. Read the addition sentence to your neighbor."
S: *will turn to their neighbor and read, "40 + 60 = 100"*

Introduction to New Material (Direct Instruction): (8 minutes)
• Write a blank subtraction sentence on the board.
T: "Let me tell you a story. There is a juggler. He has a box that holds 100 balls. I will write 100 on the last blank."
• Write 100 on the last blank.
T: "There are 68 balls in the box already. I will write 68 on the first blank."
• Write 68 on the first blank.
T: "How many more balls will fit in the box? Hmm, how do we solve this problem? Look at the equation. 68 + ___ = 100."
T: "68 is one part of the 100, what is the missing part? You need to find the missing part."
• Hand out 11 little ten-frames to each student.
T: "Use the little ten-frames to model. I will use these ones on the board."
T: "To find the other part of 100, add on. Start by adding the ones to make the next ten."
T: We have 68, what is the next ten?"
S: *will say, "70."*
T: "Yes 70 is the next ten, we need to add two to 68 to make 70. Show me 70 with your ten-frames."
S: *will show 70 with their the-frames.*
T: "Awesome, everyone is holding up 7 ten-frames. Put those on one side."
S: *will put their 7 ten-frames on one side.*
T: "How many more tens do we need to make 100? Let's count on from 70 to 100. Count with me. 70, 80, 90, 100. How many more tens do we need?'

S: *will respond, "3 more tens" or "30."*

T: **"You are right! Let's put 3 ten-frames on the other side. 70 plus 30 equals 100. Are we forgetting something? Did we start with the number 70? Tell your neighbor what number we started with."**

S: *will tell their neighbor, "we started with 68."*

T: **"We started with the number 68. Remember we added 2 to 68 to make 70. Now we need to give those 2 back to 30 to make 32. Let's put the whole problem together. I will write it on the board and I want you to read it to your neighbor."**

S: *will turn to their neighbor and read, "68 + 32 = 100."*

Guided Practice: (10 minutes)

Use the modeling cycle:

Teacher Does:

T: **"I need you to practice 4 more problems with a partner using the Finding Parts of100 page (page 191).**

1 Students Does with Teacher:

T: **"I need a volunteer to show us how to subtract tens."**

• Teacher will choose a student.

T: **"The problem is 64 + ___ = 100."**

• Write the problem on the board 64 + ____ = 100.

T: **"What do you do first?"**

S: *will respond, "first I find the next 10."*

T: **"Yes, what is the next 10?"**

S: *will respond, "the next 10 is 70."*

T: **"The next 10 is 70, how many ten-frames do you need?""**

S: *will respond, "7 ten-frames."*

T: **"Good, now put them over here. What comes next?"**

S: *will respond, "next I add ten to make 100."*

T: **"Good job! Let's count on 70, 80, 90, 100. How many tens did we need to add?"**

S: *will respond, "we added 3 tens."*

T: **"Put the three ten-frames over here. Is there anything else we need to do? We have 70 + 30 = 100. Did we add any ones when we found the next 10?"**

S: *will respond, "yes, we start with 64."*

T: **"Yes, so now you need to add the ones. We started with 64, so 64 + 36 = 100."**

T: **"Thank you for your help. Please take a seat."**

2 Students Do:

T: **"Now I need two people to help me.**

• Teacher will choose 2 students.

T: **"I need you two to demonstrate the activity. Remember to say,**
   o **First I make the next ten.**
   o **Next, I add tens to make 100.**
   o **Then I add the ones.**

• Write the sentence frames on the board.

S: *will demonstrate the activity using the sentence frames.*

T: **"Good job, thank you. Please take your seat."**

All Students Do:

T: **"Now it is your turn. I am going to write the four problems I want you to use on the board."**
   o **17 + ___ = 100**
   o **66 + ___ = 100**
   o **41 + ___ = 100**
   o **82 + ___ = 100**

T: **"You need to solve all the problems on the board. You and your partner will take turns explain how to find the missing part."**

• Teacher will pass out page 191.

S: *will finish the four problems.*

• Teacher will walk around the room listening to the student conversations and checking their work.

T: **"(teacher will clap hands), Time is up! Come back to your spots. 10,9,8,7,6,5,4,3,2,1"**

• Collect all the papers.

Independent Practice: (7 minutes)

T: "Now it is your turn to practice on your own. We will do the first problem together and then your will finish 3-10 on your own."

T: "When I call your name you will need to stand up and go to your table."

- Teacher will call out the student names and send them to their tables.
- Teacher will pass out guided practice page 188.

T: "Look at problem 1, what number do you see on the ten-frames? Count them."

S: *will count.*

T: "There are 58 dots on the ten-frame. 10, 20, 30, 40, 50, 51,52,53,54,55,56,57,58. Write 58 on the first blank."

S: *will will write 58.*

T: "What goes on the last blank?"

S: *will respond, "100"*

T: "Yes, 58 minus what equals 100? Tell your partner how to do it."

S: *will say, "first I find the next ten – 60."*

S: *next student says, "then I add tens to make 100 - 40"*

S: 1st *student says, "last I add the ones – 58, 42."*

S: 2nd *students say, "58 + 42 = 100"*

T: "58 plus what equals 100?"

S: *will respond, "42."*

T: "Correct! 58 + 42 = 100. Now it is your turn. Begin. You have 5 minutes."

- Teacher will walk around the room checking student work.

T: "(teacher will clap hands), **Time is up! Come back to your spots. 10,9,8,7,6,5,4,3,2,1**"

- Collect all the papers.

Closing: (5 minutes)

- Pass out ten-frames.

T: "Let's do one more problem together. I will tell you a story."

T: "Jorge has a puzzle with 100 pieces. I will write 100 on the board."

- Teacher will write 100 on the last blank of the addition sentence.

T: "He has already put together 38 pieces. I will write that on the first blank."

- Teacher will write 38 + _____ = 100."

T: "How many more pieces does he need to put together? What do I do first?"

S: *will respond, "make the next ten."*

T: "I will make the next ten. What ten comes after 38? Tell your neighbor."

S: *will tell their neighbor, "40."*

T: "40 is the next ten. Then what do I do?"

S: *will "add tens to 100."*

T: "I will write 40 + ___ = 100 on the board. Count with me, 40, 50, 60, 70, 80, 90, 100. How many tens did I add to make 100."

S: *will respond, "6 tens" or "60"*

T: "Yes, we added 60. 40 plus 60 equals 100. What is the next step?"

S: *will respond, "the next step is to add the ones."*

T: "Yes, we started with 38, so we need to add two to 60. 38 plus 62 equals 100. Read the addition sentence to your neighbor."

S: *will read, "38 plus 62 equals 100" to their neighbor.*

T: "Well done!"

Assessment:

Guided Practice