Grade 2	Lesson: 6-3 Adding Tens and Ones	Reference to English

Math Standard(s): 2.NBT.5 (also 2.NBT.8, 2.NBT.9) Domain: Number and Operations in Base Ten

Content Objective(s):	Language Objective(s):
Student will add a two-digit number to a two-digit number using mental math. *I can add a two-digit number to a two-digit number in my head.*	Students will say the order of events while adding two-digit numbers. *I can say how to add two-digit numbers.*
Essential Understanding: Two-digit numbers can be broken apart using tens and ones and added in different ways.	**Required Academic Vocabulary for Word Wall:** **Listen:** **Read:** **Write:** **Speak:** first, second, tens, ones **Sentence Frame:** First add the ____. Second add the ____.
Materials: • Little ten-frames (Teaching Tool 7) • Number cards (10-14, 20-24, 30-34) • Bag (1 bag per groups of 2 students) • Whiteboards, markers, erasers • Adding Ones (page 165) • Guided Practice (page 166)	**Additional Lesson Vocabulary:** Skateboard wheels, markers, colored pencils, crayons

Lesson: **Instructional Time: 30 -35 minutes**

Opening: (5 minutes)

- Have the students on the carpet at the beginning of the lesson.
- Write 2 blank addition sentences on the board. Fill them in as you tell the stories.

T: "You have learned how to mentally add tens to two-digit numbers. Today you will learn how to mentally add tens and ones to a two-digit number."

T: "I am going to tell you a story and I want you to use mental math to find the answer."

T: "Jose has 44 markers in the box. I will write 44 on the board."

- Teacher writes 44 on the board.

T: "He has 20 markers on the table. I will write 20 on the board."

- Teacher will write 20 on the board.

T: "How many markers does Jose have in all? I have 44 plus 20. First add the tens. Second add the ones. Tell your neighbor."

S: *will tell their neighbor, "First I add the tens, 40 plus 20 equals 60. Second I add the ones, 0 plus 4 equals 4. 60 plus 4 equals 64."*

T: "How many markers does Jose have in all?"

S: *will respond, "64."*

T: "Let's do it together. First I add the tens, 40 plus 20 equals 60. I'll write that on the board. Second I add the ones, 0 plus 4 equals 4. I'll write that on the board. 60 plus 4 equals 64. I will write 64 on the board."

- Teacher will write 64 on the board.

T: "Lisa has 21 colored pencils in her case. I will write 21 on the board."

- Teacher will write 21 on the board.

T: "She is using 7 other colored pencils for an art project. I will write 7 on the board."

- Teacher will write 7 on the board.

T: "How many colored pencils does Lisa have in all? Remember, 1st I add the tens and 2nd add the ones. Tell your neighbor."

S: *will tell their neighbor, "First I add the tens, 20 plus 0 equals 20. Second I add the ones, 7 plus 1 equals 8. 20 plus 8 equals 28".*

T: "How many colored pencils does Lisa have in all? Let's do it together. What do I do first?"

S: *will respond, "add the tens"*

T: "First I add the tens, 20 plus 0 equals, what?"

S: *will respond, "20"*

T: "Yes, I will write 20 on the board. What do I do second?"

S: *will answer, "add the ones"*

T: "Yes, second I add the ones, 7 plus 1 equals? Show me with your fingers."

S: *will show 8 with their fingers.*

T: "7 plus 1 equals 8. I will write it on the board. 20 plus 8 equals?"

S: *will shout out, "28"*

- Teacher will write 28 on the board.

Introduction to New Material (Direct Instruction): (5 minutes)

- Pass out whiteboard, erasers, and markers.

T: "To start with, write a blank addition sentence on your board, like this."

S: *will write an addition sentence on their board.*

T: "Let me tell you a story. Monica has 24 crayons. Write 24 on your whiteboard."

S: *will write 24 on their boards.*

T: "Paul has 64 crayons. Write 64 on your whiteboard.

S: *will write 64 on their board.*

T: "How many crayons do they have in all? 24 + 64 = ____. What do we do first?"

S: *will raise their hands and say, "add the tens."*

T: "Yes, we add the tens first. Write it on your board."

S: *will write 20 + 60 = 80 on their board.*

T: "Show me your board. Most of you wrote 20 plus 60 = 80. Good job! What do we do second?"

S: *will raise their hand and say, "add the ones"*

T: "Yes, second we add the ones. 4 plus 4 equals what? Write it on your board."

S: *will write 4 + 4 = 8 on their board.*

T: "Show me your board. You wrote 4 plus 4 equals 8. Well done, now solve the problem, 24 plus 64 equals what?"

S: *will solve 24 + 64 = 88.*

T: "Show me your board. (check the student answers) **Now, read the addition sentence to your neighbor."**

S: *will read their addition sentence to their neighbor, "24 + 64 = 88."*

T: "Let's say it together, 24 + 64 = 88."

Guided Practice: (12 minutes)

Use the modeling cycle:

Teacher Does:

T: "Now it is your turn to practice with a partner. Each group will be a bag with number cards in it and page 165. One student will pick 2 cards one from the bag. The other student will write the addition sentence on the paper. You will take turns saying the steps you used to solve it."

- Teacher will demonstrate the activity.
- Write an addition sentence on the board.

T: "First I pick 2 cards from the bag. The number on the card is 27. The number on the second card is 35. I will write them on the blanks addition sentence on the board."

T: "So, 27+ 35 = ____? Read the addition sentence with me."

S: *will read, "27 + 35 = _____?"*

T: "Good, this time I will add just the tens of the second number. 27 plus 30 equals ____? Let me write it on the board."

- Teacher will write 27 + 30 = ____ on the board.

T: "Tell your neighbor 27 plus 30."

S: *will tell their neighbor, "27 plus 30 equals 57."*

T: "27 plus 30 equals 57. Second I will add the ones from the second number. 57 plus 5 equals ____? Let me write the equation on the board."

- Teacher will write 57 + 5 = ____ on the board.

T: "So, 57 + 5 = 62. Read the original addition sentence to your neighbor, 27 plus 35 equals 62."

S: *will read 27 + 35 = 62 to their neighbor.*

T: "When doing mental math, you can start by adding the tens of both numbers or just one."

1 Students Does with Teacher:

T: "I need a helper."

- The teacher will choose one student to volunteer.
- Write an addition sentence on the board.

T: "First I draw 2 cards from the bag. The number on the card is ____. The number on the second card is ____. Please write those numbers on the blanks in the addition sentence."

S: *will write the numbers in the addition sentence.*

T: "I will read the addition sentence, ___ + ___ = ____. What do I do first?

S: *will say, "add the tens."*

T: "Good, ____ + _____ = ____. What is 2nd?

S: *will say, "add the ones."*

T: "Yes, I add the ones. ___ + ___ = ___. So, what is the answer?" ___ + ___ = ____."

S: *will say the answer "___ + ___ = ___."*

T: "Now it is your turn to pick two cards."
S: *will pick 2 cards and say their numbers. "The first card is ____. The second card is ___."*
- Continue the activity until the addition sentence is filled in and read by the teacher and student.

T: "Thank you, please sit down."

2 Students Do:

T: "I need two students to come up and demonstrate the activity."
- Teacher will choose 2 students to come up and demonstrate the activity.

T: "Here is your bag of cards, please show us what to do."
S: *will demonstrate the activity by picking 2 cards from the bag, solving, writing, and reading the addition sentence.*
- The teacher will prompt the students as needed.

T: "Thank, please sit down.

All Students Do:

T: "Now it is your turn. I will give you each group a bag of numbers and page 165. You will need to do all 6 problems. Switch responsibilities each turn. And don't forget to say what you do first and what you do second. You will have 4 minutes."
S: *will do the activity.*
- Teacher will walk around the room checking on the students.

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: (6 minutes)
T: "Now it is your turn to do it all on your own. I am going to pass out your guided practice page. We will do number 1 together and then you need to complete 2-8."
T: "Write this addition sentence on your board, 17 + 42 = ____. Use mental math to solve. What do you do first and what do you do second."
S: *will solve the problem on their board.*
T: "Show me your boards. Turn to your neighbor and teach them how you solved the problem."
S: *will turn to their neighbor and say, "first I added the 10s. Second I added the ones. The answer is ___ + ___ = ___."*
T: "What did you do first?"
S: *will say, "added the tens."*
T: "What did you do second?"
S: *will say, "added the ones."*
T: "What is the answer?"
S: *will say, "___ + ___ = ____.*
T: "Good job, now it is your turn. When I call your row, you may collect your paper and return to your desk."
S: *will collect their papers and complete guided practice.*
- Teacher will walk around the room helping students as needed.

T: "10, 9,8,7,6,5,4,3,2,1. Time is up. Turn your papers in and quietly come back to the carpet. You have 10 seconds. 10,9,8,7,6,5,4,3,2,1."
S: *will turn their papers in and return to the carpet.*

Closing: (4 minutes)
- Students need their whiteboard, eraser and markers.

T: "I have a story to tell you. As I tell you the story I need you to write down the addition sentence. Billy puts 24 skateboard wheels in a pile. He put 24 more in another pile. How many wheels does Billy have in all? What numbers did you write down? Show me your boards."
S: *will write 24 + 24 = ___ on their boards.*
T: "Good, most of you wrote 24 + 24 = ___ (write it on the board). **Solve the problem and then tell your neighbor how you did it. What did you do first? What did you do second."**
S: *will solve 24 + 24 = ____ and then tell their neighbor how they did it. "First I added the tens. Second I added the ones. 24 plus 24 equals 48."*
T: "What did you do first?"
S: *will say, "added the tens."*
T: "What did you do second?"
S: *will say, "added the ones."*
T: "What is the answer?"
S: *will say, "24 plus 24 equals 48."*

T: “Good job today.”
Assessment:
Guided Practice