

Grade 2	Lesson: 6-4 Adding on a Hundred Chart	Reference to English
<b>Math Standard(s): 2.NBT.5 (also 2.NBT.9) Domain: Number and Operations in Base Ten</b>		
<b>Content Objective(s):</b>		<b>Language Objective(s):</b>
Students will use a hundred chart to add 2 two-digit numbers. <i>I can use a hundred chart to add 2 two-digit numbers.</i>	Students will use then and last to explain the order of adding 2 two-digit numbers. <i>I can use the words then and last when adding 2 two-digit numbers.</i>	
<b>Essential Understanding:</b> Patterns on a hundred chart can be used to add numbers and to develop mental math strategies and number sense.	<b>Required Academic Vocabulary for Word Wall:</b> <b>Listen:</b> <b>Read:</b> <b>Write:</b> <b>Speak:</b> next, last, then <b>Sentence Frame:</b> First I find ____. Second I find ____. Last ____.	
<b>Materials:</b> <ul style="list-style-type: none"><li>• Hundred Chart (Teaching Tool 13)</li><li>• Crayons</li><li>• Whiteboards, markers, erasers</li><li>• Adding Ones (page 169)</li><li>• Guided Practice (page 170)</li></ul>	<b>Additional Lesson Vocabulary:</b> First, second, hundred chart,	
<b>Lesson:</b>		<b>Instructional Time: 30 minutes</b>
<p><b>Opening: (3 minutes)</b></p> <ul style="list-style-type: none"> <li>• Have the students on the carpet at the beginning of the lesson.</li> <li>• Write <math>43 + 36 = \underline{\quad}</math> on the board.</li> </ul> <p><b>T: "You have learned how to add the tens and ones in 2 two-digit numbers. Let's do one together."</b></p> <p><b>T: "Look at the board. 43 plus 36 equals what? What do we do first? Tell your neighbor."</b></p> <p><i>S: will tell their neighbor, "add the tens first."</i></p> <p><b>T: "First we add the tens. What is 40 plus 30?"</b></p> <p><i>S: will say, "70."</i></p> <p><b>T: "Yes, 40 plus 30 is 70. What do we do second, tell your neighbor."</b></p> <p><i>S: will turn to their neighbor and say, "add the ones."</i></p> <p><b>T: "Yes, we add the ones. 3 plus 6 equals what? Show me with your fingers."</b></p> <p><i>S: will show 9 with their fingers.</i></p> <p><b>T: "70 plus 9 equals ____?"</b></p> <p><i>S: will respond, "70 plus 9 equals 79."</i></p> <p><b>T: "Correct, so, 43 plus 36 equals 79. Good job!"</b></p> <p><b>T: "Today you will learn how to use a hundred chart to add tens and ones of 2 two-digit numbers."</b></p> <p><b>Introduction to New Material (Direct Instruction): (5 minutes)</b></p> <p><b>T: "Look at the hundred chart on the board. Last year you talked about the patterns on the hundred chart. Who can tell me one of the patterns?"</b></p> <p><i>S: will raise their hand and tell the class on pattern on the hundred chart, "skip count by tens" or "numbers get bigger"...</i></p> <p><b>T: "Right, now I am going to write an addition sentence on the board. 32 plus 43 equals _____. We are going to use the hundred chart to find the sum."</b></p> <p><b>T: "I need someone to come up and find 32 on the chart."</b></p> <ul style="list-style-type: none"> <li>• Teacher will choose one student to come up and find 32.</li> </ul> <p><i>S: will find the number 32.</i></p> <p><b>T: "Correct, I will put a circle around the number 32. How much is 10 more than 32? Tell your neighbor."</b></p> <p><i>S: will turn to their neighbor and say, "42."</i></p> <p><b>T: "If you are at 32 on the hundred chart, which way do you move to get to 42? Up or down? If you move up show me thumbs up. If you move down show me thumbs down."</b></p> <p><i>S: will show thumbs down.</i></p> <p><b>T: "Yes, you move down one row. Where is the number that is 40 more than 32? Do you move up or down, show with your thumb."</b></p> <p><i>S: will show thumbs down.</i></p>		

**T: "How many rows down do you move? Tell your neighbor."**

*S: will tell their neighbor, "4 rows."*

**T: "I am going to draw an arrow from the number 32 to the number 4 rows down."**

- Teacher will draw the arrow and end at 72.

**T: "What number is it? Write it in the air as you say it."**

*S: will say "72" as they write it in the air.*

**T: "Good job, now let's add the ones. We need to move 3 to the right to show 3 more ones. What number is it? Tell your neighbor."**

*S: will say, "75."*

**T: "Let me write it on the board.  $32 + 43 = 75$ . Say it with me."**

*S: will say, "32 plus 43 equals 75."*

**T: "That is how you add using the hundred chart. What did we do first?"**

*S: will respond, "found the first number."*

**T: "Yes, we first found the first number. Then we added the tens of the second number. That was when we added 40 and not 43. What did we do last?"**

*S: will respond, "we added the ones."*

**T: "Correct, first we found the number, second we added the tens, last we added the ones. Good job!"**

### **Guided Practice: (10 minutes)**

Use the modeling cycle:

Teacher Does:

**T: "Now it is your turn to practice with a partner. Each group will be give page 169. Each of you will demonstrate how to do one problem."**

- Teacher will write both equations on the board.
- Teacher will demonstrate the activity.

**T: "Let's practice with one more. The addition sentence is  $48 + 31 = \underline{\quad}$ . First I find 48."**

- Teacher will find the number 48.

**T: "Second I add the tens of the second number – 31. That is 30. So I will move down 3 rows. 48, 58, 68, 78. What is the last thing I do?"**

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

**T: "Yes, I add the ones. I will count to the right, 78, 79."**

**T: "Back to the original addition sentence, 48 plus 31 equals 79."**

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: "Here is the addition sentence,  $62 + 27 = \underline{\quad}$  (write it on the board)."**

**T: "I want you to tell us the steps you will use to add these numbers. What do you do first?"**

*S: will say, "first I find 62."*

**T: "Good, find 62."**

*S: will find 62.*

**T: "What is second?"**

*S: will say, "second I add the tens of 27, 20."*

**T: "Add 20."**

*S: will add 20, "62, 72, 82."*

**T: "What comes last?"**

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

**T: "Awesome, do it."**

*S: will add the ones, "82, 83, 84, 85, 86, 87, 88, 89."*

**T: "Good job, read the addition sentence with me. 62 plus 27 equals 89."**

*S: will say the addition sentence with the teacher.*

**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 are the two addition sentences,  $42 + 13 = \underline{\quad}$  and  $75 + 22 = \underline{\quad}$ ."**

S: *will demonstrate the activity by using the hundred chart and saying the steps.*

- *First find the number.*
- *Second add the tens of the second number.*
- *Last add the ones.*

• The teacher will prompt the students as needed.

T: **“Thank, please sit down.”**

All Students Do:

T: **“Now it is your turn. There are two addition sentences on the board. Each group will have to do both problems.  $23 + 25 = \underline{\quad}$  and  $14 + 57$  And don’t forget to say what you do first, second and last. 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: (7 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: **“Look at the addition sentence on the board,  $17 + 32 = \underline{\quad}$ . What do you do first?”**

S: *will say, “find 17.”*

T: **“Here is 17. What comes next?”**

S: *will say, “add the tens of the 32, 30.”*

T: **“Correct, we are going to move 3 rows down. Count with me, 17, 27, 37, 47. What is last?”**

S: *will say, “add the ones.”*

T: **“How many ones?”**

S: *will say, “2.”*

T: **“Count with me, 47, 48, 49. Say the addition sentence with me.”**

S: *will say, “ $17 + 32 = 49$ .”*

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: (3 minutes)**

T: **“I have a story to tell you. As I tell you the story we will first write the addition sentence and then use the hundred chart to solve.”**

T: **“Sara has 48 buttons. Luis has 32 buttons. How many buttons are there in all? What numbers to I write in the addition sentence? Tell your neighbor.”**

S: *will tell their neighbor, “48 and 32.”*

T: **“Read the addition sentence with me. 48 plus 32 equals  $\underline{\quad}$ .”**

S: *will read the addition sentence with the teacher.*

T: **“What do we do first? Tell your neighbor.”**

S: *will turn to their neighbor and say, “find 48”*

T: **“First we find 48 on the hundred chart. I will circle it. What then?”**

S: *will say, “then we add the tens from 32, 30.”*

T: **“How many rows do we move down? Show me with your fingers.”**

S: *will show 3 with their fingers.*

T: **“Count with me, 48, 58, 68, 78. What do we do last?”**

S: *will say, “last we add the ones.”*

T: **“Add the ones with me, 78, 79, 80. Read the addition sentence to your neighbor.”**

S: *will turn to their neighbor and read, “48 plus 32 equals 80.”*

T: **“Good job today.”**

**Assessment:**

**Guided Practice**