

Grade 2	Lesson: 8-3 Adding Two- and One-Digit Numbers	Reference to English
Math Standard(s): 2.NBT.5 (also 2.NBT.9) Domain: Number and Operations in Base Ten		
Content Objective(s):		Language Objective(s):
Students will add a one-digit number to a two-digit number, regroup if necessary, and record the process in a vertical addition frame. <i>I can add a one-digit number to a two-digit number and regroup if necessary.</i>		Students will teach their partner the order used to regroup. <i>I can teach my friend how to regroup.</i>
Essential Understanding: The standard addition algorithm for two-digit and one-digit numbers breaks the calculation into simpler calculations using place value, starting with the ones place and then the tens. Answers to the simpler calculations are used to give the final sum.		Required Academic Vocabulary for Word Wall: Listen: Read: Write: Speak: Sentence Frame: 1 st , 2 nd , 3 rd , 4 th , 5 th _____.
Materials: <ul style="list-style-type: none">Place – Value Mat A (Teaching Tool 8)Red Colored PencilWhiteboards, erases and markers.Models to Add Two- and One-Digit Numbers (page 221)Guided Practice (page 222)		Additional Lesson Vocabulary: Cans
Lesson:		Instructional Time: 40 minutes
Opening: (3 minutes) <ul style="list-style-type: none"> Draw an addition frame on the board. Pass out whiteboards, markers and erasers. T: “You have learned how to use connecting cubes and a place-value mat to show adding two- and one-digit numbers. Today you will learn how to use paper and pencil alone to add two- and one-digit numbers.” T: “This means that we are going to use add without the objects today.” Let me tell you a story. Aiden has 24 balls. He got 9 more. How many balls does Aiden have now?” Introduction to New Material (Direct Instruction): (7 minutes) <ul style="list-style-type: none"> Pass out whiteboards, markers and erasers. T: “Please write an addition frame on your board like mine.” <i>S: will write an addition frame on their board.</i> T: “Let me tell you a story. Aiden has 24 balls. He got 9 more. How many balls does Aiden have now?” T: “Use the information in the story to fill in the addition frame.” <i>S: will use the information from the story to fill in the addition frame.</i> T: “Check your addition frame with mine. Do you have 24 on the top and 9 below the 4?” <i>S: will check their addition frames.</i> T: “Show me your boards. Good, every one wrote it correctly. Now, let’s add! Where do I start?” <i>S: will respond, “start with the ones.”</i> T: “Yes, I start with the ones. Tell your neighbor what 4 plus 9 is.” <i>S: will tell their neighbor, “4 plus 9 is 13.”</i> T: “Say it together, 4 plus 9 is 13. How can I regroup 13 ones? Tell your neighbor.” <i>S: will tell their neighbor, “regroup 13 into 1 ten and 3 ones.”</i> T: “We will regroup 13 into 1 ten and 3 ones. So let’s write 3 in the ones place. Where do I write the 1 ten? Write it on your board.” <i>S: will write 3 in the ones place and 1 in the box above the tens place.</i> T: “Show me our boards. (teacher will check the student boards to make sure they are writing the information correctly) What do we do next?” <i>S: will respond, “add the tens.”</i> T: “Yes, we add the tens. Write down the answer to 1 plus 2.” <i>S: will write down 3 in the tens places.</i> T: “Please read the addition sentence to your neighbor, 24 plus 9 equals 33.” <i>S: will read, “24 plus 9 equals 33” to their neighbor.</i>		

T: "Thumbs up if we regrouped and thumbs down if we did not regroup."

S: will show thumbs up.

T: "Yes, we regrouped!"

Guided Practice: (12 minutes)

Use the modeling cycle:

Teacher Does:

T: "Now it is your turn to practice with a partner. I want one of you to be the teacher and the other to be the students. Then you will switch roles. I will first show you what I mean."

1 Student Does With Teacher:

T: "Now I need 1 student to help me."

- Teacher will choose a student.

T: "I want you to teach me how to add using the addition frame. I will pick the cards and you will teach me."

T: "First I will pick two cards from the number cards 1-7. I chose 2 and 8. Will you please write 28 on the addition frame on the board."

S: will write 28 on the addition frame on the board.

T: "Good, now I will choose 1 card from the number cards 5-9. I chose 6. Will you please write 6 in the ones place below 8?"

S: will write 6 below the 8.

T: "Now, please teach me how to add. Tell me what I do first and then second."

S: will say, "first you add the ones. 8 plus 6 equals 14. Then regroup. Write 4 in the ones place. Write 1 above 2."

T: "So first I add the ones. 8 plus 6 equals 14. I write the 4 in the ones place and 1 about the 2 in the tens place. What next?"

S: will say, "add the tens. 1 plus 2 equals 3."

T: "Will you read the addition sentence to me?"

S: will read, "28 plus 6 equals 34."

T: "Awesome! 28 plus 6 equals 34. Did we need to regroup?"

S: will respond, "yes"

T: "Very good, thank you for teaching me how to add and regroup. You may sit down."

- Help the student with the steps as needed. If they need help with the language, scaffold them along.
- Write the steps on the board so students can use it while they are teaching each other.

2 Students Do:

- Have 2 addition frames written on the board.

T: "Now I need two helpers."

- Teacher will choose two students to come up and help.

T: "Student #1 I need you to teach student #2 how to add using the addition frame. Student #2 I need you to pick the cards."

S: #2 will pick the cards and student #1 will write them in the addition frame.

S: #1 will teach student #2 how to add the numbers.

- 1st add the ones.
- 2nd regroup.
- 3rd write the ones in the ones place.
- 4th write the tens above the tens.
- 5th add the tens

- Scaffold the students as needed.

T: "Now you get to switch. Student #1 you will pick the cards and student #2 you will teach student #1 how to add and regroup."

S: #1 will pick the cards and student #2 will write them in the addition frame.

T: "Student #2 I need you to pick a card from the deck and write it on the addition frame."

S: will pick a card and write the number on the addition frame on the board.

T: "Student #2 teach student #1 how to add and regroup."

S: #2 will teach student #1 how to add and regroup.

T: "Thank you for your help. Now you may sit down."

All Students Do:

T: "Now it's your turn! I will give each group a page 221 and 2 decks of cards. You will need to complete 3 more problems. You will have 6 minutes."

S: will do the activity.

- Teacher will walk around the room helping and guiding groups as needed.

T: "10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Time is up. Please clean up the connecting cubes and turn in your papers, then sit on the floor."

- Collect the papers.

Independent Practice: (10 minutes)

T: "Now it is your turn to practice individually. We will do the first one together and then you will finish guided practice by yourself."

T: "I have the problem written on the board, 22 plus 9 equals ____? Do we add the ones or the tens first?"

S: will respond, "the ones."

T: "Yes, we add the ones first. What is 2 plus 9?"

T: "Raise your hand if you know what 2 plus 9 is."

S: raise their hands and say "2 plus 9 equals 11."

T: "Do we need to regroup? Thumbs up or down?"

S: will show thumbs up.

T: "I will write 1 below the ones and the other 1 in the box in the tens. What do we do next?"

S: will respond, "add the tens."

T: "Yes, we add the tens. 1 plus 2 equals ____? Tell your neighbor."

S: will tell their neighbor, "1 plus 2 equals 3."

T: "Show me with your fingers."

S: will show 3 with their fingers.

T: "Good, read the addition sentence to your neighbor."

S: will read, "22 plus 9 equals 31."

T: "Very good, did we regroup? Thumbs up or down?"

S: will show thumbs up.

T: "We did need to regroup. Now it is your turn to do the rest of guided practice. You will have 8 minutes."

S: will work on the rest of the problems.

T: "10, 9, 8, 7, 6, 5, 4, 3, 2, 1. Time is up. Please clean up the connecting cubes and turn in your papers, then sit on the floor."

- Collect the papers.

Closing: (8 minutes)

- Pass out whiteboards, erases and markers.

T: "To finish up today I am going to read you a story problem. As I read it I will write the information on your board. To start with, write an addition frame on your board."

S: will write an addition frame on their board.

T: "Jody has 17 cans. She collects 5 more. Write the information on your board."

S: will write 17 and 5 on their boards.

- Teacher will write 17 plus 5 on the board in the addition frame.

T: "How many cans does Jody have in all? Find the answer."

S: will find the answer and write it on their board.

T: "Show me your boards. Good job. I wrote 17 plus 5 in my addition frame. Tell your neighbor what you do first."

S: will say, "add the ones."

T: "Yes, first I will add the ones. 7 plus 5 equals 12. I need to regroup. Where do I write the 2?"

S: will say, "in the ones place."

- Write 2 in the ones place.

T: "Where do I write the 1?"

S: will say, "in the box."

T: "Yes, I will write 1 in the box above the 1."

- Write 1 at the bottom the tens column.

T: "Then what?"

S: will say, "add the tens."

T: "Yes, add the tens, 1 plus 1 equals 2. I will write that. Read the addition sentence to your neighbor."

S: will read, "17 plus 5 equals 22."

T: "Good job, 17 cans plus 5 cans equals 22 cans!"

Assessment:

Guided Practice