

Grade 2	Lesson: 9-5 Subtracting Two-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 use the standard subtraction algorithm to subtract a two-digit number from another two-digit number. <i>I can subtract a two-digit number from another two-digit number.</i>		Students will say which numbers are bigger or smaller. <i>I can say which number is bigger or smaller.</i>
Essential Understanding: The standard algorithm for subtracting two-digit and two-digit numbers is just an extension of the algorithm for subtracting two-digit and one-digit numbers.		Required Academic Vocabulary for Word Wall: Listen: Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none"> • Connecting cubes • Number Cards (Teacher Made) • Whiteboards, erasers, and markers. • Subtracting Two-Digit Numbers (page 271) • Guided Practice (page 272) 		Additional Lesson Vocabulary: Choose, bigger, smaller, regroup
Lesson:		Instructional Time: 35 minutes
<p>Opening: (4 minutes)</p> <ul style="list-style-type: none"> • Have connecting cubes prepared to demonstrate subtraction. <p>T: “You have learned how to use models to help you subtract two-digit numbers. Let’s do one together.</p> <ul style="list-style-type: none"> • Write $41 - 13 = \underline{\quad}$ on the board in a vertical subtraction frame. <p>T: “Look at the board, $41 - 13 = \underline{\quad}$. What do we do first?”</p> <p>T: “Do I subtract ones or tens first?”</p> <p><i>S: will respond, “we subtract the ones first.”</i></p> <p>T: “Yes, we subtract the ones first. 1 take away 3. Can we take 3 cubes from 1?”</p> <p><i>S: will respond, “no.”</i></p> <p>T: “No we can’t. Do we need to regroup?”</p> <p><i>S: will say, “Yes.”</i></p> <p>T: “Yes. We need to regroup. I will take one of the groups of tens and break it up. How many ones do I have now? I will write 11 in the box over the ones and cross out the 4 and make it 3.”</p> <p>T: “Now I will take away 3. How many do I have now?”</p> <p><i>S: will respond, “8.”</i></p> <p>T: “Now we need to subtract the tens. What is 3 minus 1? Tell your neighbor.”</p> <p><i>S: will turn to their neighbor and say, “3 minus 1 equals 2.”</i></p> <p>T: “Show me with your fingers, what is 3 minus 1?”</p> <p><i>S: will show 2 fingers.</i></p> <p>T: “Let me write it. Now, please read the subtraction sentence to your neighbor.”</p> <p><i>S: will read the subtraction sentence to their neighbor, “$41 - 13 = 28$.”</i></p> <p>T: “Good job, today you will only use paper and pencil to subtract two-digit numbers...no cubes today.”</p> <p>Introduction to New Material (Direct Instruction): (7 minutes)</p> <ul style="list-style-type: none"> • Pass out whiteboards, erasers and markers. • Write $71 - 3 = \underline{\quad}$ on the board in a vertical subtraction frame. <p>T: “Look at the board, $71 - 3 = \underline{\quad}$. Write the equation on your board.”</p> <p><i>S: will write $71 - 3$ on their board.</i></p> <p>T: “What do we do first?”</p> <p>T: “Do I subtract ones or tens first?”</p> <p><i>S: will respond, “we subtract the ones first.”</i></p> <p>T: “Yes, we subtract the ones first. 2 take away 3. Can we take 3 from 2?”</p> <p><i>S: will respond, “no.”</i></p> <p>T: “No we can’t. Do we need to regroup?”</p> <p><i>S: will say, “Yes.”</i></p> <p>T: “Yes. We need to regroup. I will take one of the groups of tens and break it up. How many ones do I have now? I will write</p>		

11 in the box over the ones and cross out the 7 and make it 6."

T: "Now I will take away 3. How many do I have now?"

S: *will respond, "8."*

T: "Now we need to subtract the tens. What is 6 minus 0? Tell your neighbor."

S: *will turn to their neighbor and say, "6 minus 0 equals 6."*

T: "Show me your boards." (teacher needs to check the student boards to make sure they are subtracting correctly)

S: *will show their boards to the teacher.*

T: "Let me write it. Now, please read the subtraction sentence to your neighbor."

S: *will read the subtraction sentence to their neighbor, "71 - 3 = 68."*

T: "Let's do another, but this one will be 2 two-digit numbers. I will write it on the board, $71 - 23 = \underline{\quad}$."

• Teacher will write $71 - 23 = \underline{\quad}$ on the board.

T: "Please write 71 minus 23 on your board."

S: *will write 71 - 23 on their boards.*

T: "What do you do first when subtracting these numbers? Do you subtract the tens or the ones?"

S: *will respond, "we subtract the ones first."*

T: "Yes, we subtract the ones first! Look at your ones, do you need to regroup?"

S: *will respond, "yes."*

T: "You are right, we need to regroup. Please subtract the ones on your board. When you are done subtracting the ones, hide your board and don't show it until I ask for it."

S: *will subtract the ones and hide their boards.*

T: "You all have subtracted your ones, you hid your boards, now please show them to me."

S: *will show their boards.*

• Teacher will check the student work.

T: "Good job. I see that you all subtracted the ones. Let's do it together. What is 1 take away 3? Tell your neighbor."

S: *will turn to their neighbor and say, "you cannot take 1 from 3, so you need to regroup. 11 take away 3 is 8."*

T: "I heard some one say, 'you can't take 3 from 1, you have to regroup. 11 take away 3 is 8. I will write that on the board. I can't forget to write how many tens are left either.'"

• The teacher will show the subtraction on the board.

T: "Now what, we have subtracted the ones by regrouping, what do we do next?"

S: *will respond, "subtract the tens."*

T: "You said we need to subtract the tens, go ahead and subtract the tens. Don't show your board until I ask you to."

S: *will subtract the tens.*

T: "Show me your boards. Good, 6 take away 2 equals 4. I will write that on the board. As I write it, please read the subtraction sentence to your neighbor."

S: *will say, "71 minus 23 equals 68" to their neighbor.*

T: "Read it with me one more time, 71 minus 23 equals 68. Thank you."

Guided Practice: (10 minutes)

Use the modeling cycle:

Teacher Does:

T: "Now I need you to practice with a partner. Each group will be given two sets of cards. One deck of cards will have numbers 50-99 and the other deck will have numbers 10-49. Each of you will draw 1 card and subtract them. I will first show you how it needs to be done and then you will do it with a partner."

1 Students Does with Teacher:

T: "I need a student to come up and help me."

• Teacher will choose a student.

T: "To start with you need to choose a card."

S: *will choose a card.*

T: "What number is on your card?"

S: *will say the number.*

T: "Now I will choose a card from the other pile."

• Teacher will choose a card.

T: "I chose $\underline{\quad}$ (the number). Which number is bigger?"

S: *will respond by saying the bigger number.*

T: "Correct, $\underline{\quad}$ is bigger, so that number will go on top. You need to be writing this subtraction problem on your boards too."

S: *all the students will do the problem as a class on their whiteboards while it is being demonstrated.*

• Teacher will write the number in the subtraction frame on the board.

T: "What number is smaller?"

S: will respond with the smaller number.

T: "You are correct, please write that number underneath the bigger number in the subtraction frame."

S: will write the smaller number in the subtraction frame.

T: "Now we need to subtract. What do we do first?"

S: will respond, "we subtract the ones first."

T: "Do we need to regroup?"

S: will respond, "yes" or "no"

• If the problem needs regroup the student will do it, but if not they will only subtract the ones.

T: "Good job, you subtracted the ones. Now what?"

S: will respond, "subtract the tens."

T: "Please go ahead and subtract the tens."

S: will subtract the tens.

T: "Good job, please read the subtraction sentence to me."

S: will read the subtraction sentence to the class.

T: "Thank your help. Please take your seat."

2 Students Do:

T: "Now I need 2 students to come up and demonstrate."

• Teacher will choose 2 students.

T: "Thank you. I need you each to pick a card, decide which number is bigger and then write it on the board in the subtraction frame. Remember to use your words as you solve the problem."

S: will each pick a card, write it on the board and solve the problem. They will say the steps of solving the problem as they do so.

• Teacher will guide the students and remind them to use words as they solve the problem.

T: "You guys have done a really good job! Thank you. Please sit down."

All Students Do:

T: "Now it is your turn. I will call out the groups and you will need to collect one of these papers and two decks of cards. Then you will begin."

• Teacher will call out the groups.

S: will work in partners to complete the papers.

• Teacher will walk around the room helping groups as needed.

T: "10,9,8,7,6,5,4,3,2,1. Time is up. Please turn in your papers, clean up your area and come back to the carpet."

S: will turn in their papers, clean up their area and sit on the carpet.

Independent Practice: (8 minutes)

T: "Now it is your turn to work independently. We will do the first guided practice problem together and then you will do the rest of them on your own."

• Write $34 - 15$ on the board.

T: "Look at the problem on the board. I will first write it in the subtraction frame. Then what do we do?"

S: will respond, "subtract the ones."

T: "Yes, first we subtract the ones, tell your neighbor if we need to regroup or not."

S: will tell their neighbor, "yes, we need to regroup."

T: "Go ahead and subtract the ones by regrouping."

S: will subtract the ones.

T: "Now that we have subtracted the ones, what do we do next?"

S: will respond, "subtract the tens."

T: "Please subtract the tens."

S: will subtract the tens.

T: "Please show me your boards."

S: will show the teacher their boards.

T: "Well done! Read the subtraction sentence to your neighbor."

S: will read, "34 minus 15 equals 19" to their neighbor.

T: "Now it is your turn to finish the rest of the problems on the guided practice page. You will have 7 minutes. Then I will collect them."

• Teacher will pass out papers.

S: will collect their papers and begin their work.

• 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 in your papers and return to the carpet."

Closing: (2 minutes)

- Make sure all the students still have their whiteboards.

T: "To finish off today let's do one story problem. As I read it I need you to write it on your board."

T: "Dan has 72 balls. (give students time to write 72) Josie has 56 balls. (give students time to write 56) How many more marbles does Dan have than Josie?"

T: "So, Dan has 72 balls, did you write that at the top of the subtraction problem? And Josie has 56 balls, did you write that below 72? This is how I would write it."

- Teacher will write the equation on the board.

T: "Now I need you to work with a friend or by yourself and solve 72 minus 56."

S: will work independently or with a friend to solve the problem.

- After students solve the problem on their own, go through the steps of subtraction and solve it with them.

T: "Please read the subtraction sentence to your neighbor."

S: will read the subtraction sentence to their neighbor.

T: "Good job today!"

Assessment:

Guided Practice

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