

Grade 2	Lesson: 8-7 Adding More than Two Numbers	Reference to English
Math Standard(s): 2.NBT.6 (also 2.NBT.5 and 2.NBT.9) Domain: Number and Operations in Base Ten		
Content Objective(s):		Language Objective(s):
Students will use paper and pencil to add 3 and 4 two-digit numbers. <i>I can use paper and pencil to add 3 and 4 two-digit numbers.</i>		Students will practice saying addition sentences with more than 2 two-digit numbers. <i>I can say addition sentences with more than 2 two-digit numbers.</i>
Essential Understanding: Three and four two-digit numbers can be grouped and added in any order.		Required Academic Vocabulary for Word Wall: Listen: number line Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none">Number CubesAdding More than Two Numbers (page 237)Guided Practice (page 238)		Additional Lesson Vocabulary:
Lesson:		Instructional Time: 40 minutes
Opening: (1 minutes) <ul style="list-style-type: none"> T: "You have learned how to add two numbers using different strategies. Let's practice two strategies, counting on and making 10." <ul style="list-style-type: none">Write $17 + 8$ on the board. T: "Look at the problem on the board. 17 plus 8. Let's count on to find the answer. We start with 17 and then count on to add 8 more. Turn to your neighbor and count on to find the answer." <i>S: will turn to their neighbor and count on from 17 until they get to 25.</i> T: "Count on with me. I start at 17, 18, 19, 20, 21, 22, 23, 24, 25. I counted on 8 and reached 25. 17 plus 8 equals 25. Read the addition sentence on the board to your neighbor." <i>S: will read, "17 plus 8 equals 25."</i> T: "Good job, let's do one more. This time we will make ten. The problem is 27 plus 15. I will write it on the board." <ul style="list-style-type: none">Write $27 + 15 = \underline{\quad}$ on the board. T: "We need to first make ten. What is the nearest ten to 27? Raise your hand." <i>S: will raise their hand and say, "30."</i> T: "Yes, 30 is the nearest ten. How many did I need to add to make 30? Show me with your fingers." <i>S: will show 3 with their fingers.</i> T: "Let me draw this on the board. To start with I have 2 tens (draw two tens rods) and 7 ones (draw 7 loose cubes). I want to make another ten so I add 3 more (add 3 more cubes cross them out and draw another tens rod). Now I have 30 plus what? Tell you neighbor, is it 30 plus 15 or another number?" <i>S: will say to their neighbor, "30 plus 12."</i> T: "When I add 3 to 27 to make another ten I took it from 15. 15 minus 3 equals 12. Let's first add the tens, what is 3 plus 1?" <i>S: will say, "4."</i> T: "Now let's add the ones to make 42. Read the addition sentence to your neighbor." <i>S: will read, "27 plus 15 equals 42."</i> T: "Every one together, "27 plus 15 equals 42."		
Introduction to New Material (Direct Instruction): (7 minutes) <ul style="list-style-type: none">Write $4 + 6 + 4$ on the board in vertical format.Hand out whiteboards, erasers and markers. T: "Look at the board. There is an addition problem with 3 numbers. I want you to try to solve it. I will give you 30 seconds, begin." <i>S: will try to solve $4 + 6 + 4$ on their own using their whiteboard.</i> T: "Time is up, show me your boards. (check the student boards to see if the students added correctly)." <i>S: will show the teacher their boards.</i> T: "When I add 3 numbers I start with just 2 and then add the third. Let me show you. We have 4 plus 6 plus 4." <ul style="list-style-type: none">Demonstrate how to add the numbers by writing them on the board.		

T: "I start by adding the first 2 numbers. 4 plus 6. 4 plus 6 equals 10. Then I add the last number. 10 plus 4 equals 14. So, 4 plus 6 plus 4 equals 14."

Guided Practice: (minutes)

Use the modeling cycle:

Teacher Does:

T: "Today I want you to practice with a partner. You will be adding 3 two-digit numbers. But before I let you and your partner begin I would like to show you how."

T: "Each partnership will be given 2 number cubes. You will take turns tossing the number cubes to make 3 two-digit numbers. The 1-2 number cube will make the tens, the 1-6 number cube will make the ones. Let me show you."

- Teacher will roll the 1-2 number cube, and write the number in the tens place. Then roll the 1-6 number cube and write the number in the ones place.

T: "As I write the problem on the board, I want you to do the same on your board."

T: "Did you see how I rolled both number cubes? I wrote the number from the 1-2 cube in the tens place and the number from the 1-6 cube in the ones place. I have to do that 2 more times."

- Teacher will roll both cubes 2 more times and make 2 more two-digit numbers and will write them in the two-digit addition frame with the first number.

T: "Now I have 3 two-digit numbers to add. Do I start with the ones or the tens?"

S: will respond, "with the ones."

T: "Yes, I start with the ones because I might have regroup."

- Teacher will add the ones place. If regrouping is necessary, they will regroup.

T: "I have add the ones, now what?"

S: will say, "add the tens."

T: "I want you to add the tens on your board."

S: will add the tens on their board.

T: "Show me your boards (check the student boards to see if they added correctly). Good job, you all added the tens. I will add the tens too."

- Teacher will add the tens.

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

S: will read the addition sentence to their neighbor.

1 Students Does with Teacher:

T: "Now I need a helper."

- Teacher will choose a student.

T: "We are a team. We will take turns rolling the number cubes and writing the numbers. You go first. I need you to roll the 1-2 cube and the 1-6 cubes once."

S: will roll the cubes once.

T: "Good, now write them in the addition frame on the board."

S: will write the numbers in the addition frame on the board.

T: "Remember the 1-2 number goes in the tens and then 1-6 number goes in the ones."

T: "Now it is my turn to roll the cubes and write the numbers."

- Teacher will roll and write the numbers.

T: "Your turn again."

S: will roll and write the numbers again.

T: "Now we need to add these three numbers, do we add the ones or the tens first?"

S: will say, "we add the ones first."

T: "Ok, you add the ones first, and then I will add the tens."

S: will add the ones and write the answer, they will regroup if necessary.

T: "Good job. I will add the tens."

- Teacher will add the tens.

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

S: will read the addition sentence, $___ + ___ + ___ = ___$

T: "Thank you for your help, please sit down."

2 Students Do:

T: "Now I need two students to come up and demonstrate the activity."

- Teacher will choose two students.

T: "I need you to take turns rolling the number cubes, write the numbers and adding the ones and then the tens. You ready?"

S: *will demonstrate the activity in front of the class.*

- Teacher will help the students as needed – remind students to use as much language as possible.

T: **“Good job, you may sit down.”**

All Students Do:

T: **“Now, it is your turn. You will each be given 2 number cubes and page 237 – Adding More than Two Numbers. Each group will do 2 problems. You will have 5 minutes.”**

S: *will do the activity.*

- Teacher will walk around the room helping students and reminding them to use the language as they work together.

T: **“10, 9, 8, 7, 6, 5, 4, 3, 2, 1 Time is up. You need to put your cubes away and turn in your papers. Then come sit on the carpet.”**

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

Independent Practice: (minutes)

T: **“Now you need to practice on your own. I will do the first problem with you and you will finish guided practice by yourself.”**

- Write $18 + 12 + 15$ on the board.

T: **“I have written the problem on the board, you need to write it on your white board.”**

S: *will write $18 + 12 + 15$ on their boards.*

T: **“We are adding 3 two-digit numbers. Do we add the ones or the tens first?”**

S: *will respond, “we add the ones first.”*

T: **“Yes, we add the ones first. Please add the ones, you have 20 seconds.”**

S: *will add the ones.*

T: **“Show me your boards. Good, when I add the ones I first add the 8 plus 2. What is 8 plus 2?”**

S: *will respond, “8 plus 2 equals 10.”*

T: **“Yes, 8 plus 2 equals 10. What is 10 plus 5?”**

S: *will respond, “10 plus 5 equals 15.”*

T: **“Good job, 10 plus 5 equals 15. I need to regroup. I will write the 5 in the ones place and the 1 in the tens place above the problem.”**

- Teacher will write down the 1 and 5.

T: **“Now I add the tens. Please add the tens on your board. You have 10 seconds.”**

S: *will add the tens place, $1 + 1 + 1 + 1 = 4$.*

T: **“Show me your boards. Now let’s do it together, 1 plus 1 plus 1 plus 1 equals ____? Show me with your fingers.”**

S: *will show 4 fingers.*

T: **“Good job, 18 plus 12 plus 15 equals 45. Please read the addition sentence to your neighbor.”**

S: *will read “18 plus 12 plus 15 equals 45” to their neighbor.*

T: **“Well done, I will pass out your guided practice sheet and you will need to finish the rest of the problems. You will have 5 minutes.”**

- Teacher will pass out the papers and the students will work at their desks.
- Teacher will walk around the room monitoring and helping students.

T: **“10, 9, 8, 7, 6, 5, 4, 3, 2, 1 Time is Up! Please turn in your papers and come sit at the carpet.”**

S: *will turn in their papers and sit on the carpet.*

Closing: (minutes)

T: **“To end the lesson, we will add 4 two digit numbers. You will need to write the problem on your board while I write it on mine.”**

T: **“Cody and Jill play with toy trucks. 28 trucks are blue. Write 28 on your board.”**

- Teacher and student will write 28 on their boards.

T: **“32 trucks are yellow. Write 32 on your board.”**

- Teacher and student will write 32 on their boards.

T: **“17 trucks are green. Write 17 on your board.”**

- Teacher and student will write 17 on their boards.

T: **“11 trucks are pink. Write 11 on your board.”**

- Teacher and student will write 11 on their boards.

T: **“How many trucks in all? Let’s add the ones together. What is 8 plus 2 plus 7 plus 1? 8 plus 2 is 10. 10 plus 7 is 17. 17 plus 1 is 18. Write 18 where it belongs.”**

S: *will write 18 in their equation.*

T: **“Show me your boards. Perfect, most you did it correctly. We needed to regroup so we wrote the 8 in the ones place and put the 1 above the tens place like this.”**

- Teacher will write the 18 where it belongs.

T: "Now I want you to add the tens place on your own. You have 20 seconds."

S: will add the tens place."

T: "Show me your boards. Good job. 1 plus 2 plus 3 plus 1 plus 1 equals 8. I will write 8 in the tens place. Did you get the same answer? Check your work."

S: will check their work.

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

S: will read, "28 plus 32 plus 17 plus 11 equals 88" to their neighbor.

T: "Let's read it once together. 28 plus 32 plus 17 plus 11 equals 88. Good job today!"

Assessment:

Guided Practice

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