Today's Lesson: To show the steps required to use different mental math strategies to multiply.	
CCSS	Number and Operations in Base Ten, Grade 4 (Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations.) 4.NBT.5
Focus Lesson 1 (I do)	"*We have been learning how to use basic facts to multiply by multiples of 10 and 100. Today we are going to learn some other strategies that will help you multiply mentally."* Begin the lesson by giving students the following scenario. "*Owen and 5 friends bought tickets to a baseball game. The cost of each ticket was 37 dollars. How much did the tickets cost in all?"* The teacher will give the students time to think how they would mentally find the answer. Then the teacher will write '6 x 37 =' on the board or chart paper and think aloud. "*I know that Owen and his 5 friends would be a total of 6 people. I know that I am trying to find out what 6 x 37 equals. I know that I can substitute 37 for 40, because 37 is close to 40. It is also easier to multiply 6 times 40. 6x40 = 240. The answer of 240 is easy to find mentally. Now we need to adjust our answer. How do we get from 37 to 40? (add 3) To adjust, we need to take away 6 groups of 3 from 240 to find the answer. What is 240 - 18?* (222) Still thinking aloud, the teacher will say, "I just used 'compensation' to find the answer to *6 x 37. Compensation is when you find a number that is close to the number in the problem, to make the problem easier to figure out. Then, we have to adjust the answer for the numbers that we picked*."
Round of Daily 3 Math	
Focus Lesson 2 (We do)	The teacher will put the following problem on the board: 9 x 17. The teacher will say, *"I would like for you to mentally solve the problem 9 x 17."* (The teacher will give appropriate wait time, and then continue.) *"Next, I would like for you to share with an elbow buddy, how you mentally solved the problem, and what answer you came up with." (*The teacher will wait for the students to discuss their process with an elbow buddy.*)* *" How many of you solved the problem by using compensation for the 9, by rounding it to 10?" Then the teacher will ask, "How many of you used compensation for the 17, and rounded it to 20?"*

	The teacher will then remind students that there may be more than one way to use compensation when solving problems. The teacher should remind students that they will adjust by adding when they round down, and they'll adjust by subtracting when they add up. The teacher will then present the students with a few more problems for them to practice individually, then discuss their process and answers with an elbow buddy. Problems: 61 x 9 104 x 8 32 x 7
Round of Daily 3 Math	
Focus Lesson 3 (You do)	Present students with the following story problem: "*Mrs. Davis wants to buy every student in her class a new backpack. Mrs. Davis has 22 students in her class. Each backpack costs $9.00. How much will Mrs. Davis spend on the backpacks?"* The teacher should ask students to solve the problem and show their work. Another choice for students to complete would be: "*Mandi used compensation to find the product of 27 x 3. First, she found 30 x 3 = 90. Then she adjusted that product by adding 3 groups of 3 to get her final answer of 99. What did she do incorrectly?"* Students should be able to show the correct work and explanation for the problem. (Students should subtract instead of add when adjusting.)
Student Sharing	