Grade 2	Lesson: 2-5	Reference to English

Math Standard(s): 2.OA.1 **Domain: Operations and Algebraic Thinking**

Content Objective(s):	Language Objective(s):
Students will find the sum of three addends using any order. *I can find the sum of three addends using any order.*	Students will use the word addend when talking about addition problems. *I can use the word addend when talking about addition problems.* .
Essential Understanding: Three or more whole numbers can be grouped and added in any order.	**Academic Vocabulary for Word Wall:** **Listen: in any order, make it easier** **Read:** **Write:** **Speak: first, then (sequencing words)** **Sentence Frame:** **First add _____together. Then ____+_____ is_____.**
Materials: • **Connecting cubes (Teaching tool 1)** • **Paper bag** • **Guided Practice Sheet**	**Additional Lesson Vocabulary:** addend

Lesson: Adding Three Numbers **Instructional Time: 30 mins**

Opening: (3 minutes)

- Prepare a bag of connecting cubes (three different colors) for each group of three.

T: We've been learning lots of ways to solve addition problems. So far, you have always had to add just two numbers together. Today we'll learn what to do if you have to add more than two."
"Think for a minute. Do you ever have to add more than two numbers? When? Turn and tell your partner."
S: will tell partner
T: "When I call on you, tell me what you heard your partner say." Call on a few students
S: will share what they heard their partner say
T: "Great! So now we know we have to do it sometimes. But how?"

Introduction to New Material (Direct Instruction): (5 minutes)
T: "Let's say you and two friends are counting cars that pass by. You count 6 red cars, your friend counts 5 white cars, and your other friend counts four silver cars. Let's think of some ways to find the sum of 6,5,and 4."
Split children up into groups of three, giving each connecting cubes in a paper bag.
On the board, write 6+5+4.
T: Take the cubes out of the bag and figure out different ways to add these numbers.
S: will work in their small groups with cubes to find different ways to represent and group the numbers.
T: "How did you do it?" Choose a few groups to explain their methods to the class. If no-one suggests making ten to add, make a single stick showing the numbers in the order 6,5, and 4 in three different colors.
T: "Can I take the 4 at the end of the stick and move it next to the 6 on front? Think about what we learned yesterday. Thumbs up or down."
S: will use thumbs to answer, yes
Move the cubes to the front. Point to the colors showing 4 and 6
T: "How many cubes do these two colors show? Use you fingers to show me"
S: will hold up ten fingers
T: " Good! So first we add 4+6. Then it's easy to add 10 and 5. We can move the numbers around to use whatever method we've learned, like doubles, near doubles, or plus 1, plus 2."

Guided Practice: (12 minutes)
T: "Now take apart all of your cubes, and put them back in the bag.
S: will break cube up until they are single cubes, then place them back in the bag.
T: "We're going to play a game. Listen carefully so you'll understand what to do. I'll know you're ready to listen when your cubes are put away, arms folded and I can see your face looking at me.
First, One partner will close their eyes and reach their hand into the bag and grab some cubes. Keep grabbing until you have at least one cube of each color. Then all three of you will connect the cubes that are the same color, and count how many cubes of each color you have. Write these three numbers in the boxes for addends on page 53. What should you do after you've closed your eyes and grabbed at least one cube of each color out of the bag?"

S: will respond “Put the cubes of the same color together, count them, and write the number in the boxes.”
T: “Good! Once you have your addends written, you can decide as a team a strategy to use to make it easier to add. Circle the numbers you added first, and write the sum of those numbers in the box right here. Also write the addend you still have, here, then find your final answer. What numbers should you circle? Turn and tell your partner.”
S: will tell partner to circle the numbers they added first.
T: “Great, and each time say “First we add _____. Then ____+____=____.”
T: “You have 5 minutes to play. Go!”

Use the modeling cycle:
Teacher Does:
T: “Your work today will help you practice adding three numbers in different ways. When we add three numbers, we have to choose two of the three to add together first. If you look at number one, you can see they circled the two numbers they chose to write first. Can you see what adding strategy they used? Tell your partner>”
S: Will tell partner double 6
T: Yes! They knew double 6 was 12, so they first added 6 and 6. Point to the box where they wrote 12.”
S: will point to the box on the right.
T: Yes. So now we just add 3 to 12 to get our answer. You can see they wrote 15. Now next to that problem, we have the same problem. We need to add the other two numbers first this time, so 6 and 3. Show me with your fingers th number that is 3 more than 6.”
S: will hold up 9 fingers
T: Good! So you can see they wrote 9 in the box. Now to find our answer, we need to know the number 6 more than 9, 15.
On each of these problems, you’ll circle the numbers you add first.

2 Students Do with Teacher:
T: Let’s have two students come up and help us do number 2.”
S: will come to the front and teach how to answer number 2. If they don’t explain that they can use the near doubles strategy, remind them.

Independent Practice: (8 minutes)
T: “You can use your counters to help you with number 3-14. Remember to circle the numbers you add first and put that sum in the box. You have 8 minutes to work. Go!” Walk around watching and working with students who may need re-enforcement.

Closing: (3 minutes)
Have students get out their whiteboards
Write 3+5+6 on the board
T: “Write down two different ways you could add these numbers together. When I clap my hands, hold your boards up for me to see”
S: will write, then hold up board when given the signal.

Assessment:

Whiteboard assessment