Fruits and Vegetables Task Transcript

Mrs. Hall: Let's look at problem #3, Ivey.   Can you tell us about this problem in your own words?

Ivey: It says that Jeff is buying some fruits and vegetables. He's going to buy 4 carrots, 5 bananas, and 2 tomatoes.

Mrs. Hall: What are you trying to find out in this problem?

Ivey: He's buying fruits and vegetables. I need to find out how much they weigh.

Mrs. Hall: Will you be doing anything else with this problem?

Ivey: Yes, I have to figure out the pounds and ounces and put that right here.

Ivey points to the blanks beside the words "pounds" and "ounces" in problem 3.

Mrs. Hall: How can you use one of the previous problems you've already solved to help you?

Ivey: I drew circles for the plums.

Mrs. Hall: How will you begin solving this problem? Do you have a plan?

Ivey: I think I'm going to draw circles for the fruit and vegetables too.

Mrs. Hall: Great! Why don't you get started and we'll come back to talk with you about your strategy.

16 _____

2. Jeff buys 4 apples.
   What is the least amount they can weigh?

   Explain your answer:

   I used four apples which equal four pounds
   so you multiply four times four

3. Jeff buys 6 plums.
   What is the greatest amount they can weigh?   1 ___ pound 2 ___ ounces

4. Jeff buys 4 bananas and 5 carrots and 2 tomatoes.
   What is the least amount they can weigh in all? _____ pound _____ ounces

   Show how you figured it out.

   BANANAS ⃝ ⃝ ⃝ ⃝
   carrots ⃝ ⃝ ⃝ ⃝ ⃝
   tomatoes ⃝ ⃝

4. Jeff buys half a pound of grapes.
   What is the greatest number of grapes he can get?   _____

   Explain how you got your answer.

   _____
   _____
   _____
   _____

Fruits and Vegetables Task Transcript

Mrs. Hall: I see you have gotten started on this problem, Ivey. Can you tell us about your drawing? What do these pictures represent?

Ivey: It's a picture of the fruits and vegetables.

Mrs. Hall: What do your pictures show us?

Ivey: I drew the circles for the fruits and vegetables like I did for the plums and I put labels for the bananas, carrots, and tomatoes.

Mrs. Hall: I noticed that you have a different number of circles beside for the banana, carrots, and tomatoes. Why is that?

Ivey: I needed 4 bananas, 5 carrots, and 2 tomatoes.

Mrs. Hall: Can you tell us what you are going to do next?

Ivey: I'm going to see how much the bananas weigh and I'm going to put it in the circle for the bananas.

Ivey refers to the customary measurement sheet for the fruits and vegetables.

Mrs. Hall: What did you find out?

Ivey: 5 ounces.

Ivey shared only the greatest amount that the bananas could weigh.

Mrs. Hall: Remind me again what you will be finding out in this problem.

Ivey rereads the problem and looks back at the information sheet for the fruits and vegetables.

Mrs. Hall: How does that change your thinking?

Ivey: So, a banana weighs 3 and 5.

Ivey writes a "3" in each of the circles indicating 3 ounces for each banana.

Mrs. Hall: Because there were two numbers to show the weight for the bananas, how did you choose the 3?

Ivey: I said, "What is the least amount it could weigh?" The smallest banana could weigh 3.

Mrs. Hall: It could weigh 3 what?

Ivey: It could weigh 3 ounces.

Fruits and Vegetables Task Transcript

Fruits and Vegetables Task Transcript

Mrs. Hall: Ok, then what will you do next?

Ivey: The carrots weigh 2 to 5 ounces. So, it's going to be 2 ounces, right?

Mrs. Hall: Can you show us all you are thinking on your paper? We will come back to learn more about how you solved this problem.

Ivey records the weights for the banana, carrots, and tomatoes in each circle.

Mrs. Hall: I see that you have all of your drawing completed. Have you found the answer yet?

Ivey: No, not yet.

Mrs. Hall: How will you figure out the answer? What's your plan?

Ivey: I'm going to add all these together.

Ivey begins to count the circles beside the bananas, "3, 6, 9, 12." Although she had shown multiplication in the previous problem, Ivey skip counts in sharing her strategy.

Mrs. Hall: Ivey, I see that you're skip counting by 3's. Is that same strategy you used for the other problems?

Ivey had been working with others at the table previously on problems 1 and 2. She had work very similar to several students sitting beside her. She looks back at the previous problem.

Ivey: No, I multiplied.

Mrs. Hall: Can you explain your thinking in problem 2?

Ivey looks at problem 2 and counts the groups of 3 pointing to them with her pencil and skip counting.

Ivey: 3, 6, 9, 12, 15, 18.

She then points to the multiplication problem.

Ivey: *So, that's 6 plums times 3 ounces equals 18 ounces.*

She then goes back and recounts the groups of 3 in the problem.

Ivey: So that would be 1, 2, 3, 4, 5, 6 plums

She then points to the multiplication problem where she has written 6 plums. She then points to each circle again.

Fruits and Vegetables Task Transcript

Ivey: *Times 3 ounces and that equals 18 ounces.*

Fruits and Vegetables Task Transcript

Mrs. Hall: Can you tell us how multiplication helped you solve this problem?

Ivey: At first, I didn't know to multiply, but we were talking at our table and Anna and Beth showed me.

Mrs. Hall: How can you use your strategy in problem 2 to help solve problem 3?

Ivey: I could multiply 3 times 4 and get 12.

Because the picture Ivey drew had 4 circles with 3 written in each circle, I was curious if she understood what these numbers represented.

Mrs. Hall: What does the 3 and the 4 represent in this multiplication problem?

Ivey: 3 ounces and 4 carrots.

This indicated that Ivey knew there were 4 groups of carrots that weigh 3 ounces each.

Mrs. Hall: Would you recommend that strategy to your classmates?

Ivey: Yes.

Mrs. Hall: Why is that a strategy that you could recommend?

Ivey: I think it will make it quicker than adding.

Mrs. Hall: Will you use that same strategy to find all of your answers?

Ivey: Yes.

Ivey writes 2 X 5 = 10 and 2 X 1 = 2 and then adds up 12 + 10 + 2 = 24

Mrs. Hall: Can you tell us what you decided to do with your answers when you found out how much the fruit and vegetables weighed?

Ivey: After I got the answer to the multiplication, I added all the numbers up 12 plus 10 plus 2 and that equals 24.

Fruits and Vegetables Task Transcript

Fruits and Vegetables Task Transcript

Mrs. Hall: After you wrote 12 plus 10 plus 2 equals 24, I noticed you did another operation. Can you share your thinking with us?

Ivey: I looked at what I did in the first problem that had 16 ounces equals a pound. So, I took away 16 since one pound was 16 ounces. I had 24 ounces when I added it all up. I subtracted 16 from 24 and that gave me 8. So, that gives me 1 pound and 8 ounces for my answer.