

TRACY SOLA: When I was watching you work, I saw three main strategies. I saw people doing it three different ways. The first thing I saw was Kylie and also Jade. There's a picture of a pencil here and also a cube, and it says, "Go over and over." So, what I saw them do, was I saw them put a cube here, and then I saw them put a pencil here. Then they put a cube there and a pencil there. And then they put a cube there and a pencil there and they kept going. I saw them do that. So when Kylie did that, she got five for Jeff and six for George.

Now, what I saw Bryan and Adaia doing is they took a cube and they put it this way. They put it there and drew a line. And then they put it there and drew a little line. And they put a cube and drew a little line. So they could keep track of how high the cube went up each time, and then they tried to put it right above that. So I want us to think about before we look at the last way, how are these strategies different and what does that mean for accuracy in measurement? Turn to your partner and tell your partner how they are different.

STUDENT: Kylie did it a different way and so did Bryan because they didn't count the same way.

STUDENT: Kylie did it a different way because she did one number and Bryan did more numbers.

STUDENT: Oh, and I almost forgot that Kylie put the cube first and then the pencil.

TRACY SOLA: So, Adaia, what did you say to Bryan?

STUDENT: They -- we draw lines, and they do the pencil and it's different.

TRACY SOLA: And it is different. Do you think that the measurement will turn out exactly the same if you draw a line between your cubes or if you put a pencil between your cubes? I see some people saying yes and some people saying no. Santiago, you are shaking your head no, why not? You don't know.

Well what do we think? Do you think it'll be exactly the same or do you think it will be different?

STUDENTS: Different.

TRACY SOLA: Why?

STUDENT: Because they are all different. That one only uses a pencil and a block, and that one only uses the cube, and that one only uses the pencil, um --

STUDENT: And the last one does nothing.

TRACY SOLA: Well, but these two I'm trying to think about. These two. If I take a cube, maybe I'll just do it right over here. If I take a cube right here, and if I put it at the bottom of Jeff, I saw them draw a line at the bottom of Jeff. If I put my cube right there and draw a line on top of it, and then do it again, and then do it again. I keep going. Do you think I'll get a different measurement? Maybe I'll use a different color. Then if I put a cube, there's the cube right there,

and then I put a pencil. Let's see if I can do it. That's not very easy up here. Then I put a cube and I think we started here and then I put a pencil, and then I put a cube. So here's my first cube, my second cube, and my third cube. And for these, here's my first cube, my second cube, and my third cube. Are they the same or are they different?

STUDENTS: Different.

TRACY SOLA: They're different. Why are they different?

STUDENT: Because you draw two lines.

TRACY SOLA: Why did I draw two lines? What was in that space? Do you remember how I did that one? There was that -- whoops, that's okay. There was that and then there was that. That, that, that. What was in that space?

STUDENT: A pencil.

TRACY SOLA: The pencil was in there. How high is the pencil? A little bit. Do you think it's the same height as the line?

STUDENTS: No. Mmm ... no ...

TRACY SOLA: Maybe? No? Which one do you think is taller? The line or the pencil?

STUDENTS: The pencil.

TRACY SOLA: The pencil's taller? So if we put a pencil in between each one, it gets a little bit taller, right? Now, how did these people measure? Turn to your partner and talk about this one. What did people do here?

STUDENT: They wrote numbers and they got their answer.

TRACY SOLA: So what did they do? Someone who hasn't talked for a while. Ariana, what did these people do?

STUDENT: Three of them?

TRACY SOLA: This one right here. Some people used this strategy. In fact, I think you used this strategy.

STUDENT: So, she used a line between the giraffe and she started to do the numbers.

TRACY SOLA: Oh, okay. So what did Ariana just say? Santiago, what did she just say?

What? Why did she just say, Jaira?

STUDENT: She said, "I put a line in between the giraffe" and she put numbers on it.

TRACY SOLA: And then some numbers? Okay.