TRACY SOLA: What we're going to do now, is I am going to ask you to put, if they're not already in the bins, put the cubes in the foil bins. Take your objects, please, back to the table. Return the objects back to the table. Make sure your ... Here, hun, I can get rid of this for you. Make sure your pen is in your bin as well.

You boys and girls were very, very careful measuring scientists, weren't you?

STUDENTS: Mm-hmm. [affirmative]

STUDENTS: Is that, is that a microphone?

TRACY SOLA: That is the microphone. Yeah.

STUDENTS: It's tiny.

TRACY SOLA: Yeah. So, I'm looking at what we measured. I'm looking at all of our posters, and one thing I noticed was that it seems like on number six, everybody put can on number six.

Every -- everybody who measured a can, see ... I don't see "can" anywhere else, do you?

STUDENTS: Can, can, can, can ...

TRACY SOLA: I don't -- I only see can on number six.

STUDENT: Let me look at all --

TRACY SOLA: But, if I look at seven and four, I see the tea box on seven, and I see the tea box on four. And I'm wondering how they could be both. Because here's the tea box.

STUDENT: Oh, I know!

STUDENT: I know!

TRACY SOLA: Turn to a partner and tell your partner, why do you think tea box is on the poster for four and the poster for seven?

STUDENTS: Because the side ... the number seven ...

STUDENT: No, no, no, no, be--, be--, because, um, the number seven ...

STUDENT: Zip it.

STUDENT: You just punched me.

STUDENT: No, I didn't.

STUDENT: Yes, you went like this.

STUDENT: But that not punching.

STUDENT: Yeah, but it went like this.

STUDENT: I went like this.

STUDENT: I know why! Because they measured the bottom and they measured the sides.

STUDENT: That's what I said!

TRACY SOLA: So, so Bryan, can you tell me again what you just told me?

STUDENT: Um, some people measured on the--

STUDENT: Measured the top and the, and the sides.

STUDENT: No, it was --

TRACY SOLA: Go ahead.

STUDENT: -- some people measured on the long side, some people measured on the short side.

TRACY SOLA: Oh.

STUDENT: Yep!

TRACY SOLA: Okay.

STUDENT: It's because they measure it like this. They measure it like this for the seven and then like this for the four.

TRACY SOLA: So who would like to share with the group why tea box is on two different posters?

STUDENT: I know!

TRACY SOLA: Hmm, let's see. Adaia? What did Bryan say. You heard some -- Bryan just say something. What did he say? Do you remember?

STUDENT: I do not.

STUDENTS: I do! I do!

TRACY SOLA: Do you remember, Jade?

STUDENT: Mm-hmm. [affirmative]

TRACY SOLA: What did he say?

STUDENT: Bryan said some people put, put --

STUDENT: Measure.

STUDENT: -- measure the short side and the long side.

TRACY SOLA: Some people measured the short side and some people measured the long side?

Who measured the short side? Team Santiago, Salvador, Ricardo.

Who measured the long side? Ah, team Ariana/Jaira. Okay.

STUDENT: Jaira.

TRACY SOLA: Okay. How--

STUDENT: Jaira.

TRACY SOLA: Do you say your name Haira or Jaira?

STUDENT: Both.

TRACY SOLA: Both. Okay. Okay. Now, I noticed that the blue cup is on poster eight and poster nine. And I'm trying to think about how that happened.

STUDENT: I know.

TRACY SOLA: Does a, do people think they have any ideas?

STUDENT: No.

TRACY SOLA: No ideas?

STUDENT: Nope.

STUDENT: I do.

TRACY SOLA: Santiago, go ahead. What is your idea?

STUDENT: Some people measured the, the short side and some people measured the long side? [shrugs]

TRACY SOLA: Can you tell me where th--

STUDENT: Maybe they took off one and then, and then a little bit of the cube reached up?

TRACY SOLA: A little bit of the cube reached up, and then they took off one.

STUDENT: Mm-hmm.

TRACY SOLA: Hmm. Well, do you think we can measure this right now?

STUDENTS: Mm-hmm. Yeah.

TRACY SOLA: Is there, is there somebody ... Yeah, can you come up, Santiago? And show me exactly what it is you mean? Here, why don't you stand over here where I am, right over here, and, and, uh ... here. Turn around. There you go.

And here's -- and here's some cubes for you. So why don't you show us all what you mean by that? And who thinks they know what Santiago just said? While he's building, is there somebody who would ... can explain what they think Santiago was talking about? Go ahead, what do you think he was saying?

STUDENT: He said that, um, some people measured the, the long side and the short side because there's a long side and a short side. The top is a long -- the top is a short side, and the long one is a -- the long, the long side.

TRACY SOLA: And did -- and was there anything else he said? Does anybody remember anything else he said?

STUDENTS: Hmm.

STUDENT: It's actually eight.

TRACY SOLA: What?

STUDENT: It's actually eight.

TRACY SOLA: It's right at it?

STUDENT: It's actually eight, because look. If you put one more then it would not be nine.

TRACY SOLA: Okay. So, let ... well, let's see. So you're taking a look at this. And, so that's eight right there. And then, so why do you think some people wanted to put another cube on?

STUDENT: Because it look a little bit tiny.

TRACY SOLA: Because it looks a little bit tiny? Tell me more about that. I know what you're talking about, I think. Tell me a little bit more about that. You can come over here by me. So we can ... It looks a little bit tiny, what does that mean? You mean it's not quite to the top?

STUDENT: Mm-hmm.

TRACY SOLA: So maybe we need another one? And if we put another one on then it fills up that space.

STUDENTS: Mm-hmm.

STUDENT: Yeah, but it's big. And not --

STUDENT: Nine!

Inside Mathematics

TRACY SOLA: So, but now what? It's big?

STUDENT: Yeah.

TRACY SOLA: Do you think it's too big?

STUDENTS: Yeah. Yeah. It's too big.

TRACY SOLA: It's too big?

STUDENT: Yeah.

TRACY SOLA: Well, which one do you think is closer, eight or nine?

STUDENTS: Eight. Eight. Eight.

TRACY SOLA: You think eight's closer?

STUDENT: Eight is the right answer.

TRACY SOLA: Eight is the right answer? Thanks for helping us build that! You can have a seat, hun. But leave it here because I want to talk about it just a little bit more.