STUDENT: This is humongous.

TRACY SOLA: Great! All right.

STUDENT: Yes.

STUDENT: Three, four, five, six.

STUDENT: It's one cube long.

STUDENT: It's only six.

STUDENT: One, two, three, four, five, six, seven.

STUDENT: It's hard to measure it because when you get here it has a curve and not a straight.

STUDENT: We need a shape that curves around this thing. If it's not, then it's not a shape that works.

STUDENT: Wow.

TRACY SOLA: Oh, what?

STUDENT: It has to go--

STUDENT: Mine does. [laughs]

STUDENT: Glasses.

TRACY SOLA: My--

STUDENT: Oh, it fits your glasses!

TRACY SOLA: Yep.

STUDENT: One, two, three, four, five, six, seven, eight, nine. Nine.

TRACY SOLA: -- that was as long as your cube train. What was something interesting that you found that was as long as your cube train?

TRACY SOLA: Monica?

STUDENT: Your head.

TRACY SOLA: My head? What else? Yes, Jade.

STUDENT: The globe.

TRACY SOLA: The globe? How did you measure the globe?

Inside Mathematics

STUDENT: You use friends.

STUDENT: You can connect them.

TRACY SOLA: With your friends?

STUDENT: You cannot measure with your cube because it's not, it doesn't have sides, or anything to measure and you need some curve or it doesn't even, like -- it's not like -- you have like, because you measure, like about all the same high because you use Ariana's too, and you took one away and that's how you measure it, to measure the globe.

STUDENT: Oh, you need to use this one? Here you go.

TRACY SOLA: What else did you measure that was interesting?

STUDENT: Um, feet.

TRACY SOLA: Feet? Okay. What else, Salvador?

STUDENT: My glasses.

STUDENT: We measured the box.

TRACY SOLA: The what? The box?

STUDENT: Box.

STUDENT: Oh, I know something.

STUDENT: Me -- me and Ricardo connect our cubes. And Santiago.

TRACY SOLA: You put all your cubes together?

STUDENT: Yeah.

TRACY SOLA: You needed all your cubes to measure the box?

STUDENT: But we needed to take one off.

TRACY SOLA: But then you took one off.

STUDENT: Yeah.

TRACY SOLA: And so what was the total measurement?

STUDENT: Uh ...

STUDENT: Uh, 20.

TRACY SOLA: 20?

Inside Mathematics

STUDENT: 20? No it wasn't. It was --

TRACY SOLA: How many?

STUDENT: It was 10.

STUDENT: What?

STUDENT: 30, I don't know. Was it like 30?

STUDENT: What?

STUDENT: That's what I said, 30.

STUDENT: 30.

STUDENT: You said 31.

STUDENT: 13.

TRACY SOLA: 13. How many do you each have?

STUDENT: Uh ...

STUDENT: 6.

TRACY SOLA: You each have 6. And you put them all together and took off one? That's something interesting to think about. Okay. What we are going to do now is, I am going to ask you, uh, if you have yellow, please put your cubes in, back in the bin.

TRACY SOLA: This activity, I gave them the choice to measure anything that was in the room and, um, one of the girls asked if they could measure a globe that was sitting up on a high shelf so I brought it down. And, um, another one of the girls said, "You can't measure that, because, um, it doesn't have a side." And I think what she was thinking was that it doesn't have an edge. But she didn't have the vocabulary for that and so she was saying, you know, that because it -and she used the term sphere, which was really interesting -- but because it's a sphere, it doesn't have a side, so you can't measure it. And I saw other students using their cube train to try to track it along the edge, you know, along the edge of that sphere and really thinking what it meant to, um, to measure something that was spherical in shape. That was very interesting.