

TRACY SOLA: The next lesson is a lesson where they will be measuring objects with cube trains. They will just walk around the room and explore. They have a cube train that is a certain length long and they will look for objects that are that long. So that's an exploratory activity that they could do all the time.

TRACY SOLA: I am going to give you and a partner a train of Unifix Cubes. Okay? And everybody ... you and your partner will have the same length of train. But you won't have the same length of train as another partner pair. And your job is to find things in the room--

STUDENT: Can I have blue? Are ours the same color?

TRACY SOLA: Hmm ...

STUDENT: Are they the same length?

STUDENT: No. Yeah.

TRACY SOLA: The same color or the same length. What have we been learning about today?

STUDENTS: Length.

TRACY SOLA: So, maybe the same length. Okay, so, if this is my cube train, I am going to walk around the room and try to find things that are that length. Okay? I have a question. What should we do ... Let's see, for example, hmm ... What should we do if something is in the middle of a cube? If it doesn't take up the whole cube? If it ... If it's all of ... Let's count... Well, let's count these. Okay, so this paper is not going all the way to the top of cube 12.

STUDENT: Go to 11.

TRACY SOLA: We should only go to 11? What do you all think?

STUDENT: 11.

STUDENT: 12.

TRACY SOLA: You think 12? Did you say? Some people think we should go to 11 and some people think we should go to 12. Why? How will we deal with parts?

STUDENT: Because -- because they're almost the same height, and if you took away this one then it's not gonna be ...

TRACY SOLA: Well, wait. Then it's not enough.

STUDENT: Then it's not enough. That's why.

TRACY SOLA: So you think that if it's not enough, we need to add another one?

STUDENT: Yeah.

TRACY SOLA: What do you think, Salvador? You had a different idea. You think we should count the 12th one? How come? I mean you -- you, oh wait, oh, you want to count the 12th one. You only wanted to say 11.

STUDENT: Yeah.

TRACY SOLA: Because it was 11 and some more? Tell me why you think that's a good idea.

STUDENT: Because 12 is bigger than 11.

TRACY SOLA: Because there's too much if we count number 12?

Okay, I'm not going to make a decision for us. I am going to let you and your partner decide how you want to deal with that. Okay? So, right now, let's see. How about I give you two these blues. Okay? Give me one second, here. Um, and before it's time to go, I want you and your partner to decide how many cubes you have in your train. Count them and make sure you agree. Count them and make sure you agree.

The only thing we are not going to measure are the things on that table. The only thing we're not going to measure are the things on that table. You can measure anything else. Let's see.

STUDENT: Are we gonna make some more of those?

TRACY SOLA: Yeah, later. We're going to do something. I give you three this.

What is ... what are the only things we are not going to measure in the room?

STUDENTS: That table.

TRACY SOLA: Anything on the table. That's going to sit there like it's invisible and it's not even there.

STUDENT: [Laughs]

TRACY SOLA: And we'll just pretend it doesn't exist right now. But you can measure anything else in the room.

STUDENT: Yay! What about the globe?

TRACY SOLA: If you can reach it, but without standing on a chair.

STUDENT: Oh.

TRACY SOLA: Or if you can ask me to get it down for you.

STUDENT: Oh.

TRACY SOLA: And then ... Do you want me to put the globe down somewhere where you can reach it?

STUDENT: Yeah.

TRACY SOLA: Would that be fun to measure? Well that's going to be interesting.

STUDENT: Interesting.

TRACY SOLA: Why did I just say that measuring it will be interesting?

STUDENT: Because it might be so big or little, or *medio*.

TRACY SOLA: Because it might ... or -- or *medio*. Hmm ... it could be any of those. What else? It has a very interesting shape, doesn't it?

STUDENT: It might have a ... It's a sphere. It doesn't have ... it doesn't have um, the -- the ... it doesn't have any sides to count. It's only a sphere like a ball.

TRACY SOLA: Hmm ... it doesn't have any sides to count, it's a sphere like a ball. So that might be very interesting. I'll put it over here for you in case that's something you'd like ... Okay, why don't you get up and just try to find some things that are the length of your cubes?