TRACY SOLA: This series of lessons is a part of a formative re-engagement lesson that is about non-standard measurement for first graders. So, one of the first things that I will do with them, is to establish the vocabulary of measurement. And we will be thinking about long and short as um, discrete things to describe something, but then we will also think about longer and shorter as words that can compare two or more objects together. Later in the lesson we will think about taller and shorter, and so we will think about how the word "short" is used in length, but also in height. And so that will be interesting.

This lesson starts with an activity where the students are walking off their footsteps on a length of tape and then measuring their uh ... how many steps it took to get to the end of a tape and then recording that on a piece of paper. And so what I will be looking for is how do they walk that tape? Do they walk that tape uh, heel to toe, heel to toe, with no gaps? Or do we see some gaps in their steps, um, do they notice that there are gaps? We will think about what that means. Um, we will go on to think about once everybody has recorded how many steps it took to walk across a piece of tape, we will think as a class about why did some people take more steps? And what does that mean? So it'll be really interesting to see what the kids come up with there.

TRACY SOLA: We are going to start the day by thinking about long and short. Long and short. What does long mean? Who thinks they might know what long means? Salvador.

STUDENT: Big.

TRACY SOLA: Big. And what does short mean, Jade?

STUDENT: Small.

TRACY SOLA: Small. Okay, so if we say long, that means it's big. And if it's short, it's small.

STUDENT: Yep.

TRACY SOLA: Now what if I say something is longer? What if I say it's longer, Jaira?

STUDENT: Me?

TRACY SOLA: Yes.

STUDENT: Um.

TRACY SOLA: Instead of, if I say something is long then you can say, oh that's long. But what if I say this is longer than something else, what does that mean?

STUDENT: Longest. It means longest one.

TRACY SOLA: The longest one.

STUDENT: Mm-hmm. [affirmative]

TRACY SOLA: So long, we say longer when we're comparing it to something else, right?

STUDENT: Mm-hmm. [affirmative]

TRACY SOLA: Yes, okay. So, we will be thinking today about longer.

STUDENT: And shorter.

TRACY SOLA: And, exactly. Shorter. So, the first thing we are going to do today--

STUDENT: Is longer.

TRACY SOLA: Well, we're going to do them both.

STUDENT: [laughs]

TRACY SOLA: We're going to be thinking about longer and shorter kind of all day. Um, you will need a partner, but we don't have an even group of people here so there will be one group of three. So can you two be partners? That's okay, and you two can be partners. And you two and you three boys.

STUDENTS: Yeah. Three.

TRACY SOLA: And Bryan, can you two be together? Is that okay? Great. Excellent, so you have your partner for this activity. This is what we're going to do. You need to work with your buddy, and do you see this piece of tape on the ground here?

STUDENTS: Yeah.

TRACY SOLA: Okay. There's one here and this is tape C, and here's poster C to go with it and there are some markers here, in the corner. Okay. Um, over in that corner there is a piece of tape on the ground. That's tape A and there's a poster A to go with it and the markers are just on the floor under tape -- or poster A. And then over in the back of the room is tape B, and I need to close the door and poster B will be on the door.

STUDENTS: Okay.

TRACY SOLA: And the markers are just down in the corner on the floor. Okay. So, I know you know this. When you get a marker and you use it, what do we need to do when we're done?

STUDENTS: Close the top really good.

TRACY SOLA: And you know how you can tell it's really good? Listen. Did you hear that click?

STUDENTS: Yeah.

TRACY SOLA: So you will hear a click and you'll know you've done a good job, yes?

STUDENTS: Mm-hmm. [affirmative]

TRACY SOLA: Great, okay. So, here's what you're going to do. Um, let's see. Ricardo, will you be my partner for one second so we can show the kids what we're going to do?

STUDENT: [nods head]

TRACY SOLA: Okay, come on up here. So, since you're my partner, I'm going to see how many of my footsteps long this piece of tape is. And so I'm going to walk on here and when I do that, Ricardo ,who's my buddy, my partner, is going to count my steps for me. And when I get to the very end, we are going to go over there together and I'm going to write my name and he will remind me how many steps and we'll put that number. And then we'll come back and we'll switch and Ricardo will have his turn. Can we show you?

STUDENTS: Yeah. Yeah.

TRACY SOLA: Okay. Are you ready to count for me? I'm gonna start here.

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

TRACY SOLA: Okay. Now we come over here, and I will write ... Ms. Tracy and how many steps did I have?

STUDENT: Seven.

TRACY SOLA: Seven?

STUDENTS: No, eight.

STUDENT: Oh.

TRACY SOLA: Eight. Thank you though, it's a good thing you counted, they would never would have known. So, I had eight steps. Okay, so that's what I did, and now it's your turn and I'm going to count for you, and I heard my click. That was good.

STUDENT: Yay.

TRACY SOLA: Yay, okay. Now you come on over here, and you're going to step, ready? One, two, three, four, five, six, seven, eight. We got the same. Okay, now why don't you write yours. And then I remember you got eight, so you can write an eight over there. So, remind your partner if they forget to write their number, remind them to write their number because you, you're helping each other, right? Great. Thank you, Ricardo. That -- thanks for being my buddy for a second. Okay, so everybody understands what we're doing?

STUDENTS: Yes.

TRACY SOLA: We are going to do this for maybe ten minutes, so you'll have time. What we'll do is we'll start some of you here, some of you there, and some of you there. When you finish at this line, I want you to go over to that line.

STUDENT: To B?

TRACY SOLA: To B, yes, please. And when you're finished at line B I want you to go to line A. When you're finished at A I want you to come to ...

STUDENT: Rug.

TRACY SOLA: C, line C.

STUDENT: Again?

TRACY SOLA: Well, if you haven't done it yet. We won't all start in the same place, because then there would be a traffic jam, right?

STUDENTS: Oh.

TRACY SOLA: Yes. So, okay. Why don't we have Bryan and, can you move your hair so I can see your name? Adaia, yes, I remember. Bryan and Adaia, you can start at C. And why don't we have you three boys start at C, and Ricardo's already done his. Um, let's see. How about all of you girls go over to B and you ladies over to A, and get going. And let's shut that door ... because the chart is behind there.

STUDENT: Two, three, four, five, six, seven, eight, nine, ten.

STUDENTS: Two, three, four, five, six. Six.

STUDENT: Because your feet is more bigger than us. Yeah, you can get any color.

STUDENT: Wow, you're so close to me in seven. You're crazy, you're so funny.

STUDENT: Nine. ten.

STUDENT: Eight, nine.

STUDENT: Three, four, five, six. Six.

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

STUDENT: How many did you got?

STUDENTS: Five.

STUDENT: Oh yeah.

STUDENT: Oh yeah, now me.

STUDENT: It looks better than mine.

STUDENT: I don't.

STUDENT: That looks like an A.

STUDENT: Do you have a hat? I wish I had.

STUDENTS: Four, five, six, seven, eight, nine, ten, eleven, twelve.