JIM KARDITZAS: All right. I'm Jim Karditzas. I'm the Sequoia Union High School District math lead.

MOLLY MCNINCH: I'm Molly McNinch, and I'm a math teacher at Woodside High School.

JIM KARDITZAS: We're here today to talk about the Rolling Cups FAL [formative assessment lesson]. Molly, just wanted to ask you a few questions about how you prepared for the lesson. Okay. So in anticipating your students' responses to this, what kinds of things did you consider?

MOLLY MCNINCH: So I knew that a lot of my students, when we first started the lesson with the pre-lesson, when they were watching the video, I know a lot of them would be able to conclude the shorter, fatter cup -- I had them vote before they saw the video, so kind of getting that idea of, which cup is going to be creating the larger circle?

And I think I anticipated, for my students, really how to make the problem approachable and tangible to them. So I really talked about, "Okay, how do they all relate together? How does the top relate to the bottom?" On the Rolling Cups worksheet, it has the diameters and then the roll radius, and so, making that distinction between *diameter* and *radius* and not assuming that the wide diameter was the wide radius or the narrow diameter was the narrow radius and getting those key terms in there. So I knew a lot of them were familiar with circumference, but I don't think a lot brought that into their evidence.

JIM KARDITZAS: Okay. What did you want the students to produce at the end?

MOLLY MCNINCH: Because of the rolling cups and the modeling, I think that by the end of the lesson, I wanted them to be able to produce a viable argument that they could justify regardless of if it were correct or incorrect. I really wanted them to have an argument that they clearly understood and were able to show evidence for -- and justify -- using different proportions, different models, different diagrams, what have you.

JIM KARDITZAS: What other math practices besides...

MOLLY MCNINCH: The modeling I think is very important. Their [my students'] ability to reason abstractly I think is really important. So reasoning outside of just, "What is the problem that's being given to me?," which I think is something that this particular group can struggle with because they're very, Where are my points? How much is this worth? Is this in my final grade?" And so, getting them to reason outside of just the scope of what's on the paper, I think was really important. Also, their ability to work together. The math practice -- the five and then the...

JIM KARDITZAS: [Standard for Mathematical Practice] five is "use appropriate tools strategically."

MOLLY MCNINCH: Yes.

JIM KARDITZAS: What do you anticipate they would use to help them?

MOLLY MCNINCH: I think with this, it would be helpful for them to have rulers. I saw when I was looking through their pre-lesson that a couple of them actually built diagrams using angles, and so I think the ability to have a protractor would help some of them, or some of them may not use it. Using a compass. Most of

them know how to use it... well, all of them know how to use a compass, but again, using compasses is really based off of the ability of the compass, not the student sometimes.

JIM KARDITZAS: Are there any online tools?

MOLLY MCNINCH: Oh, yeah. The Rolling Cups calculator. So, they haven't been introduced to the Rolling Cups calculator, but it will be introduced in the lesson today. So those students will be able to use that today.