

ANTOINETTE VILLARIN: In your solution or in your sharing out, you could tell me which is the top card and which is the...I'm sorry...the card that represents the top prism and the card that represents the bottom prism. Is there anybody willing to share? Okay, Keiko?

STUDENT: The two cards...I think that the two cards that represent the top and the bottom prism are G2 and G6.

ANTOINETTE VILLARIN: Okay, can you tell the class why? How do you know?

STUDENT: If we're comparing it to your prism example, then there is in total six centimeters in height of the liquid. And if there's four in the top prism, then there's going to be two in the bottom.

ANTOINETTE VILLARIN: Okay, so you're saying in this prism, if I look at it, or this model, if I...my starting situation -- and I did hear some people using these sentence stems -- if I have four centimeters here, you're saying the bottom prism will have a starting situation of two centimeters down here. Is that why you chose G2 and G6, because that one starts at four and this one starts at two?

STUDENT: Yeah.

ANTOINETTE VILLARIN: Okay, good. Is there anybody that could add to that? Was there anything else that told you it was a match? Okay, Sean?

STUDENT: In G2, it decreased by four centimeters in a second, and in G6, it increased four centimeters in one second.

ANTOINETTE VILLARIN: Okay, can you say that again because I got distracted a little bit by the sound...the P.E. [physical education] class outside? Okay, so...

STUDENT: In G2 it decreased four centimeters in a second.

ANTOINETTE VILLARIN: Uh-huh.

STUDENT: And in G6, it increased four centimeters in a second.

ANTOINETTE VILLARIN: Okay, so this is going down four centimeters in a second. Can you picture the water going down?

STUDENTS: Mm-hm.

ANTOINETTE VILLARIN: And then this one, why do we want that one to be going up four centimeters in a second? Sean?

STUDENT: Because it is to be the opposite of the one going down, and so G6 needs to go up.

ANTOINETTE VILLARIN: Okay, it has to go up because what's happening to the liquid in the bottom? What's happening to it as it goes up? It went from two...it's going to...?

STUDENTS: Six.

ANTOINETTE VILLARIN: To six. So what's happening to it?

STUDENTS: Increasing.

ANTOINETTE VILLARIN: It's increasing. Okay. All right. Is there anybody else that could add to it? So I love that you're talking about the starting situation. I love that you're talking about the rate of change, and I love that you're also considering the constraint of knowing that we're always starting with six, and that's going to stay constant throughout this lesson.