

STUDENT: So, you can glue it underneath this.

STUDENT: We shouldn't trace around it. Look, like, bam, marker. [inaudible]

STUDENT: I can't see it with pencil.

MALLORY WILLIAMSON: You're not going to be able to see much with marker. But if you put a line here, like a red dash there. Okay. So, that's where 1 sugar cube is.

STUDENT: The number 10 should be like...

STUDENT: Five—

STUDENT: Five should be right here.

STUDENT: Five sugar cubes would be like, right here.

MALLORY WILLIAMSON: Well, we're going from 1 sugar cube to 5 sugar cubes. So, mathematically, what I would is—if we mark 1, where would 2 be?

STUDENT: Like, right there.

STUDENT: Right here.

MALLORY WILLIAMSON: Okay. At that space? Anna, you want to go ahead and mark. Make sure there is, like, equal as possible. I know it's still an estimate. Be careful 'cause I think these are a little bit wider. So, the third one would be, about here. And keep going on until you get to the height.

STUDENT: Number 4 should be right here. Number 5 should be right there.

MALLORY WILLIAMSON: Keep going. I'll go ahead—

STUDENT: Number 6 right there.

STUDENT: How many are there? 1-2-3-4-5-6-7-8-9-10-11-12.

MALLORY WILLIAMSON: Okay. So then, we could put down, the height is 12 sugar cubes. And then go from there.

STUDENT: Oh, we should write it with pencil first.

MALLORY WILLIAMSON: Okay. So, how are we going from, the image that we see, to 60. So, how did we get that?

STUDENT: We wrote 4 up here, like, 4 sugar cube by 5 sugar cubes.

MALLORY WILLIAMSON: So, we can, down here, to kind of see a little—the length of these 4 sugar cubes. No. Mm-mm (negative). Because I... I know. I'm a math teacher, and I know what I mean. But if you have somebody who doesn't necessarily know what I mean, they're not going to make that connection. So, we can say the length—

STUDENT: Equals 4 sugar cubes.

MALLORY WILLIAMSON: Sugar cubes. G-T-H. (silence) 4 sugar cubes. Okay. And then we thought the height—

STUDENT: And width.

MALLORY WILLIAMSON: And width.

STUDENT: And width.

STUDENT: Width were 3 sugar cubes.

MALLORY WILLIAMSON: 3 sugar cubes. You're writing really small, dude, and we have this entire chart paper. (laughs) Just want to let you know that, okay? But you guys have recorded here, so just... you can put it off to the side or down below.

STUDENT: All right.

MALLORY WILLIAMSON: Just kind of nice and large so people understand how you maybe got that 60.

STUDENT: Do you want to put it up here? Caden do you want to put it up here? So, it'll be like, that. Like, act 1, act 2, act 3.

MALLORY WILLIAMSON: Between looking at this image and how we got 60 or a hundred.

STUDENT: Well, we could write how many sugar cubes there are on each side, or how much we thought there were.

MALLORY WILLIAMSON: Okay. So, let's do that, and we're going to do a little bit larger than what we're writing 'cause we have a whole chart paper for all three acts, okay? You don't have to reset, just write that larger when you... Okay. Let's talk about the length. How many sugar cubes did you guys originally think the length—

STUDENT: We thought it was 6 [inaudible].

MALLORY WILLIAMSON: Exactly how it was on the screen? Okay. All right. So, then record that. The length is 6 sugar cubes. And Jaadiay, is there something you can do on this to help us understand what 6 looks like when we're talking about length?

STUDENT: Um, maybe put lines on something that shows, like... and then put the numbers.

MALLORY WILLIAMSON: I-N.

STUDENT: I-N. (laughs)

STUDENT: Will this show?

MALLORY WILLIAMSON: I think you could use marker.

STUDENT: Thought... [inaudible] length... was... 6 sugar... cubes. And the width was 3... 2 cubes.

MALLORY WILLIAMSON: So, the width is going to be hard to do because that's the side of the box. But we can at least do something to this, to show that you guys thought the length was six. So, how can we do that?

STUDENT: And...

STUDENT: Put a line and then put 6. But if you put edges on—

MALLORY WILLIAMSON: Well, a cube kind of looks like grid paper, right? So, if we kind of make it look like a grid on top of the front of the box. That can help people look at the face of the cube and make that connection.

STUDENT: So, put like—

MALLORY WILLIAMSON: So, I will start off with... If you have... if you're not sure where 6 goes, that's 'cause we want to be as accurate as possible. And we can draw a line straight down the middle.

STUDENT: Mm-hmm (affirmative).

STUDENT: Do we estimate how much do we have, like—

MALLORY WILLIAMSON: It's okay. And then, these each side 'cause you have... you need 3 and 3 to make 6. Subdivide these up into thirds.

STUDENT: Into thirds?

MALLORY WILLIAMSON: Okay. So, from here, we can go into act 2. So, I'm about to go into act 2. So, when she's done with that, we should be ready for that.

STUDENT: So, can we write—

MALLORY WILLIAMSON: You're still going to go straight down this way, 'cause we're still going, the length.

STUDENT: So, I have to make thirds.

MALLORY WILLIAMSON: Yep. You can actually take a marker and draw it on straight across the box, this way. So, you can just use the line that you guys created then go straight across. On the top, so, the front face of the box. Okay?

STUDENT: We thought there was [inaudible].

STUDENT: You mean going that way, and then—

MALLORY WILLIAMSON: What did you guys originally think?

STUDENT: 30.

STUDENT: Um, our first [inaudible] is 30.

STUDENT: But now we think it's 198 or something.

STUDENT: That was ou—that was our third one.

STUDENT: Yeah.

MALLORY WILLIAMSON: Well, we're still on the first one. So, if you think the width is 3... Is that where you... the 3 came from?

STUDENT: Yeah.

MALLORY WILLIAMSON: Okay. So

STUDENT: No. We...

MALLORY WILLIAMSON: And that means—

MALLORY WILLIAMSON:

Well, if you're trying to get 10, 'cause you have 2 numbers right now.

STUDENT: Mm-hmm (affirmative).

MALLORY WILLIAMSON: So, we've got... Either break this into two separate numbers and then use this as a separate length, or we've got... 'Cause we have three sides of the box that we need to measure. So, what are some ways to get 30?

STUDENT: 5 times 6?

MALLORY WILLIAMSON: 'Cause if you use this as 10... The height is 10 and the width is 3, we're kind of missing out on the length.

STUDENT: We could do 5 times 6.

MALLORY WILLIAMSON: Which is okay 'cause we're learning through it. It's okay if we're editing as we go, okay?

STUDENT: Or...

MALLORY WILLIAMSON: So, we could do 6-5-3, okay? So, that's 5 times 6 is 30.

STUDENT: Yeah.

MALLORY WILLIAMSON: 5 times 2 is?

STUDENT: Wai—wai—wait, what? Did you say 5 times 6 is 30, and then what, what did you say?

MALLORY WILLIAMSON: Like as you said—

STUDENT: 5 times 2 is 10.

MALLORY WILLIAMSON: Okay.

STUDENT: So, we could do 5 times 2 and—

MALLORY WILLIAMSON: So, maybe the height being 5.

STUDENT: Yeah.

MALLORY WILLIAMSON: The width being 3 or the length, excuse me, being 3, and the width 2.

STUDENT: Yeah.

MALLORY WILLIAMSON: That will get you what you want. So, if you draw 5 going straight across, that can give you the height.

STUDENT: Okay.