

MIA BULJAN: 4, 5, 6, 7. How did you know where to put the dots? What pieces did you see? Who has a different idea? You think this one down here? Okay, what's the first thing you counted?

STUDENT: One.

MIA BULJAN: And where was that?

STUDENT: At the top.

MIA BULJAN: And when you counted, did you count straight down or did you count around?

STUDENT: Around.

MIA BULJAN: So let's count. One and then where did you go? Here? Two, three, four. Does everybody see this?

STUDENT: Yeah.

MIA BULJAN: How many are inside there?

STUDENTS: Four.

MIA BULJAN: Four and were you done counting? No? And what else did you count?

STUDENT: I count the ones at the bottom.

MIA BULJAN: Let's count the ones at the bottom. Everybody. 1, 2, 3. So now they have four on the top and three on the bottom. Is that still seven?

STUDENTS: Yeah.

MIA BULJAN: What do you think?

STUDENT: Oh yeah, it does make seven.

MIA BULJAN: You sure?

STUDENTS: Yeah. No.

STUDENT: I'm not sure.

STUDENT: Yeah, it does.

STUDENT: I'm not sure.

MIA BULJAN: How could you be sure?

STUDENT: Yes it does.

MIA BULJAN: Well, John Carlo, saying it louder doesn't make it true. You have to think about how you would explain it to her. How do you know that it's seven?

STUDENT: Because I did this before.

STUDENT: It is seven.

STUDENT: Four, five, six, seven, eight.

MIA BULJAN: Well, hold on. So, watch her idea. Lisette, show us how you counted.

STUDENT: Four, five, six, seven, eight.

MIA BULJAN: So you started with four. Where's the four up here? Come show me in the picture. Where do you see four? Because you went like this -- you went four. Where's that four up there? Come on. Silas, you can't just tell her no. You have to listen to what she's saying, okay? Watch her. So Silas, see if you agree with this part. She counted like this, four. Then show it to us.

STUDENT: Four, five, six, seven, eight.

MIA BULJAN: So, what's she doing? Everybody count just like her. Four, five, six, seven, eight.

STUDENTS: Four, five, six, seven, eight.

MIA BULJAN: What's she doing? Can you describe what she's doing?

STUDENT: No.

MIA BULJAN: Lisette, this is her idea. Count four and then count how many more?

STUDENT: Four, five, six, seven. Oh!

MIA BULJAN: What's her idea? She's counting what? She has a four part and what's the other part?

STUDENT: Three.

MIA BULJAN: Can you match that up here? Can you find the four and the three up here? Turn around. Is there a four and a three that you see? Okay, here's a four and then where's the three? All the way around like that. This is Lisette's way. Lisette and Ashley put this together. Does everybody see what Ashley did...I mean Lisette did? Ashley, show us on your fingers. She went like this. Everybody, eyes up here. She went four and then she counted five, six, seven. So do you see her four part?

STUDENTS: Yes.

MIA BULJAN: And do you see her three part?

STUDENTS: Yes.

MIA BULJAN: Dallon, do you see her four part? And do you see her three part?

STUDENT: Yes.

MIA BULJAN: And do you know what Lisette did? She found a four part in the picture and then she found a three part in the picture. So she matched her fingers to the four part and the three part. Lisette, what do you think the answer is, seven or eight? So let's count it again. Show me how you count. Everybody, let's watch her count. Does everybody have their eyes on Lisette so we can see her part? She's going to show us one more time. Show us the two parts that you counted.

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

MIA BULJAN: What do you think of that, John Carlo? Did that make more sense to you? Do you see a four part and a three part? Here's where Lisette saw it. She saw four and she saw three. And this is Sayana's. She also saw four and three. What do you see? Anybody see anything different? Josie, did you think of an idea? What did you find?

MIA BULJAN: Well, they did one plus one equals two and then they were just kind of quiet. So Rahahn offered this idea and, um, so we got to test it and then a lot of what happened was like, you know, he's doing the right thing, he's thinking, and all we can do is have ideas and then we just test our ideas. And some of our ideas work and some of them don't, and that's what ideas are. And then even just that little bit of a conversation, all of a sudden all of the hands were up. So like a lot of it is just that little piece of, like, convincing them it's okay to talk.

MIA BULJAN: Right now you are doing exactly what mathematicians do. You think of an idea and you test it. That's it. So, Sayana had this idea and Leilani had this idea that we can count these, and she counted them just like this. Watch how she counted. One, two, three, four, five, six, seven. And John Carlo, the mathematician, he was listening so closely that he even noticed when she made a mistake, and he could tell her which one she forgot to count. You will stop, Daniel. And that's what mathematicians do, we listen. And then we had this other idea that we could see it in parts. So Sayana saw this four part and she saw a three part. And Lisette, when she was trying to count it, she had to make sense of it for herself. She found a different four -- Cial -- and a different three.