

## Lesson Part 1a

MIA BULJAN: We're going to do an equal groups problem and I'm going to ask you for the total. Okay? So here's how I'm going to write equal groups and I don't want you to write anything, I want you to think about what that would be in your head. How could you solve that without writing anything? And remember you're going to let me know by doing this, and if you have more than one answer, or one way, or 3 ways, or 4 ways, or 10 ways. Celine what was your answer?

STUDENT: Um, 70.

MIA BULJAN: Anybody agrees with her that it's 70.

STUDENTS: No.

MIA BULJAN: Did anybody get a different answer?

STUDENT: 69.

MIA BULJAN: Okay, anybody get a different answer?

STUDENT: 84.

MIA BULJAN: And another answer?

STUDENT: 56.

MIA BULJAN: And another answer? Everybody sees their answer up here right now?

STUDENTS: Yes.

MIA BULJAN: All right. Who wants to tell us how they got their answer? Marlene.

STUDENT: I put 5, 5 um, circles and then...and then I put 14 in each one.

MIA BULJAN: So you thought of this? What are these circles?

STUDENT: The 5.

MIA BULJAN: Oh the 5 the 5, so there's 1, 2, 3, 4, 5 circles and you put 14 in here?

STUDENT: Yeah.

MIA BULJAN: And then what you put in here?

STUDENT: 14.

MIA BULJAN: Uh-huh.

STUDENT: 14. 14. 14. 14.

MIA BULJAN: So if we were going to say this problem in words we would say 5 groups of 14. Who sees 5 groups of 14 in Marlene's picture that she visualized in her head? Okay.

STUDENT: Ms. B.

MIA BULJAN: Uh-huh.

STUDENT: You can just say  $14 \times 5$  that would be easier then.

MIA BULJAN: Okay, hold on one second.

STUDENT: Yeah, that's what I did.

MIA BULJAN: Okay, hold on one second. So Marlene, tell us about what you did next.

STUDENT: Then I counted them all and...

MIA BULJAN: What's the first thing you counted?

STUDENT: I counted the ones.

MIA BULJAN: So tell me about that.

STUDENT: I counted 4 and then I got 8, 12, 16, 20.

MIA BULJAN: So she said, "I counted the ones," and I thought she meant she counted these ones. Everybody see those ones?

STUDENTS: Yes.

MIA BULJAN: But then she said, "I counted 4, 8, 12, 16, 20." Which ones is she talking about?

STUDENTS: The four ones.

MIA BULJAN: So this is a number that has some ones in it and then what is this over here? This is...

STUDENT: A 10.

MIA BULJAN: It has a 10 and some ones in it and every one of them is a 10 with some ones.

STUDENT: Ohhh.

MIA BULJAN: A 10 with some ones, a 10 with some ones, and a ten with some ones.

MIA BULJAN: So what she did was she put all of these together first and she did it by skip counting, 4, 8, 12, 16, 20. All those fours came together as this number right here 20. Then what do you do next? Was she done?

STUDENT: No.

MIA BULJAN: She's not done? How do you know she's not done Chase?

STUDENT: Because ...

MIA BULJAN: Thank you mija, you can leave it on my desk and then come sit down. So do it or not do it?

STUDENT: Do it.

MIA BULJAN: Okay, we'll talk about that in a second, sorry. Go ahead Chase. Is she done?

STUDENT: Uh, no. Because she hasn't counted the 10 because uh, 20...that's why she got 70 because she counted these tens.

MIA BULJAN: Ahhh.

STUDENT: And then she got 70 and then...

MIA BULJAN: So when she broke this apart into 10 and 4, she has to do the 4 part but she still has to do the 10 part also. So Marlene, what did that look like when you did the 10 part? Thank you Chase you can have a seat.

STUDENT: It looked like I counted 10, 20, 30, 40, and then I got 50.

MIA BULJAN: And your last one was 50. So this was 10, 20, 30, 40, 50. So now you have this 4 parts and the 10 parts, and what did you do?

STUDENT: And then I added 20 and 50.

MIA BULJAN: 20 and 50 is the same as...

STUDENT: 70.

MIA BULJAN: 70 all together. So everybody, anybody have a question for Marlene, or do you understand what she did?

STUDENTS: Understand.

MIA BULJAN: Okay. When she broke these apart, what Marlene did was she decomposed.

STUDENT: Decomposed.

MIA BULJAN: This is Marlene's way. Did anybody else break them apart?

STUDENT: I did.

MIA BULJAN: You did, but you did it in a different way? Okay, we want to hear about this way. Hold on one second.