Passion For Teaching and Learning
Grade 1: The Brownie Dilemma
Minds on Math

SPEAKER 1: All right, let's get started with our daily [reckon rack?] for this morning. Remember our norms, okay? So remember, I'm going to show you a number. I'm going to ask you to think how many, and how do you know? First, you're going to think. Okay? And that's your quiet time to think. Then when you've thought, how are you going to show me that you've got an idea? Okay, yeah, good. Nice quiet thumbs up. And then I'll give you a chance to talk to an elbow partner first. You can talk about your strategy and share it, and then we'll share it with the whole group.

Okay. So let's build our first number, and let's get going this morning. All right. So eyes are here, ready to look. Okay. All right, so give it a thought.

All right, talk with your elbow partner. How many had [INAUDIBLE]?

SPEAKER 2: So there was five and five, and the 12 in the bottom. And then I put the 10ths you get, and then I put the five and the five together.

SPEAKER 1: So the five and the three came from each of those eights, right? Okay. I got it. Did you both have a chance to share?

SPEAKER 2: And then I put the 10ths you get, and then I put the five and the five together. And then it was, like, three and three on the top and the bottom, and I attached those together and made six. And I know --

SPEAKER 1: Same strategy.

SPEAKER 2: It's easy to county to 10, so if you add, like, to that, so just count on. Like this, 10, 11, 12, 13, 14, 15, 16.

SPEAKER 1: All right. Let's share back with the whole group and see -- see what you came up with. So how many, and how did you know? All right, so Rema, how many?

SPEAKER 3: I think it's 16.

SPEAKER 1: Did other people see 16 as well? Oh, we've got lots of agreement, okay. Tell us how you saw 16?

SPEAKER 3: Because the farther apart from the two 18s, 10 and the [INAUDIBLE] six, so together it can make 16.

SPEAKER 1: Okay, let me capture your thinking here on the chart paper, let's see. So I heard you say that the five and the three from the two eights -- so sorry, which ones did you put together?

SPEAKER 3: The [INAUDIBLE] and the two and the five and five.

SPEAKER 1: Okay, what did you get when you put the fives together?

SPEAKER 3: Ten.

SPEAKER 1: Okay. And then the threes?

SPEAKER 3: Six.

SPEAKER 1: Ah. Okay. Did anybody do something different that they'd like to share? Sequina?

SPEAKER 4: So I got 16 too, because I saw eight on the top and eight on the bottom.

SPEAKER 1: Mm-hmm?

SPEAKER 4: But I split the three and five, and then I saw five on the top and five on the bottom. And then we know that was 10, and then we added the three -- added the six more, and that made 16.

SPEAKER 1: That does remind me a bit of Rema's strategy, but I really like how you explained what you saw on the top and the bottom.

Let's take a look at the next one, okay? So all right, let's build a new number. Okay, eyes are here, eye on the green zone, ready to go. Okay. All right, why don't you go ahead and talk with your elbow partner.

How did you know there were 16?

SPEAKER 5: It was the same thing, but we just took one from the top to the bottom.

SPEAKER 1: Oh, so when you said it's the same thing, the same as --

SPEAKER 5: The same as the --

SPEAKER 6: That's my strategy, too.

SPEAKER 1: That's the last number, okay. How many did you see this time?

SPEAKER 5: Sixteen.

SPEAKER 1: You saw 16 again. How about other people? Did you see 16 again? Lots of agreement. Okay, Rachel, how did you see 16?

SPEAKER 7: Because the last one, it was eight plus eight.

SPEAKER 1: Okay?

SPEAKER 7: Equals 16.

SPEAKER 1: Okay.

SPEAKER 7: And you took one away to the bottom.

SPEAKER 1: Took one away from -- okay. So one away from the top and put it down at the bottom? Okay. So first was eight and eight, one from the top, down to the bottom. I think I can capture your thinking here, too. So I took one away from the top, but added it to the bottom. So then what happens to the answer?

SPEAKER 7: It still becomes the 16.

SPEAKER 1: Okay, nothing changes. All right. Hannah, did you have something you wanted to share?

SPEAKER 8: I put this one --

SPEAKER 1: Okay. And so then you've got --

SPEAKER 8: Five --

SPEAKER 1: Oh.

SPEAKER 8: -- plus one.

SPEAKER 1: So what's down here on the bottom?

SPEAKER 8: Five.

SPEAKER 1: And five. So 10 altogether. I see what you did. Let me see if we can make sure everybody can see that as well. So we had seven and nine, and you thought it would be easier if it was six and 10? Let me see if I can capture it here. So if we gave one from the seven to the nine, let's give it one. Then we had six and 10. Ah. Why did you decide to make this a 10?

SPEAKER 7: I know 10 plus six equals 16.

SPEAKER 1: Mm-hmm?

SPEAKER 7: When you do it with a nine, it's harder to add.

SPEAKER 1: All right, let's take a look at our next one, let's build another one, ready for you. All right, let's see. Okay, eyes are here. Are you ready? Okay, share with your elbow partner.

SPEAKER 3: So I did those five and five, and then one, two, three, four.

SPEAKER 1: I notice it's starting to get a little quieter. How many this time, and how did you know? Okay. Chloe, how many this time?

SPEAKER 9: There was 14.

SPEAKER 1: Okay, how did you know there were 14?

SPEAKER 9: Because I saw five and another five, and that makes 10.

SPEAKER 1: Okay.

SPEAKER 9: And the two and the two. And the two and the two makes four. And the five and the five makes 10.

SPEAKER 1: So you saw a five and a two, right? Is that here? How much is that on the top?

SPEAKER 9: That's seven.

SPEAKER 1: Okay. So the seven has a five and a two in it, and a five and a two. And let me just record what you did. You said you put the two fives together, and that made 10?

SPEAKER 9: Yes.

SPEAKER 1: You put the two twos together, and that made four?

SPEAKER 9: Yeah.

SPEAKER 1: And you liked adding that 10 and that four. Okay, so we've got 14. All right. Did somebody have a different strategy that they want to share?

SPEAKER 10: I know that five and five makes 10, so I did those five first. And then I started to count my twos.

SPEAKER 1: Oh, okay. Can you show us what that sounded like?

SPEAKER 10: Five, 10, 12, 14.

SPEAKER 1: I heard that. Okay, great. All right. Let's work on the next one, then. Let's see what you're going to do to solve this one. Okay, eyes are here when you're ready. I'm looking around and I can see Hannah's definitely ready, Constantina's ready. All right. Okay. Okay, talk with your elbow partner. How come you're so far away from everybody?

SPEAKER 4: We wanted to say something, and we want to come back [INAUDIBLE].

SPEAKER 1: Yeah? Can you do it?

SPEAKER 4: Fifteen, 14.

SPEAKER 1: So what do you think the answer is?

SPEAKER 4: Fourteen.

SPEAKER 1: I like your strategy.

SPEAKER 4: Counting back.

SPEAKER 1: See, you have to be here talking with them. I bet your strategy would have been different from theirs.

SPEAKER 3: I've got my own strategy.

SPEAKER 1: Okay, so make sure you share together, okay?

As a whole group, what did you get this time? All right, Gregory, what did you end up with?

SPEAKER 11: Eight plus eight 16.

SPEAKER 1: Okay?

SPEAKER 11: And if you want to count back two, you could, like, it's easy. You can just, like, count back.

SPEAKER 1: Show us. Just like you were showing me before.

SPEAKER 11: Sixteen, 15, 14.

SPEAKER 1: So what's the answer you got?

SPEAKER 11: Fourteen we end up at.

SPEAKER 1: Let's write that in. Now, you went all the way back to one of the first ones we did to help you solve this one. Because I heard you say if eight plus eight is 16... And then you said something about this being two less. Count back two.

SPEAKER 11: I got 14.

SPEAKER 1: Okay?

SPEAKER 11: Because if the five and the five makes a 10 --

SPEAKER 1: Okay?

SPEAKER 11: And then the three and the one makes four, that would make 14.

SPEAKER 1: Okay. So you were -- you were pulling the numbers apart like some of your classmates have done in these strings. So you took the five and the three, and

the six as a five and a one. And you put the fives together and three and the one together? All right. Okay. You had something you wanted to share, Adam?

SPEAKER 12: Because the eight and the six, I got one from the eight, and I added it to the six, and then it was seven and seven, just like the other one. And then eight equals 14.

SPEAKER 1: Oh, interesting. Okay. So you noticed that the seven and the seven -- so you, Gregory used this one to help him. And you used this one to help you. So let me see. So, can somebody help explain to me again what Adam just said? I know you can. Can someone -- [Calcadan?], can you give it a try? What was Adam just telling me?

SPEAKER 13: So Adam said that if -- so first it was one and -- so first it was seven and seven. And then you added one to the top and took one away from the bottom.

SPEAKER 1: Okay. So I added one to the top, took one away from the bottom like you just said, and we still end up with 14. Let's do another one, and see what you're going to do with this one, okay? All right. Are you ready? Eyes are here. Mikaila looks ready, oh, Kaylee, you're definitely ready. Good, lots of good -- all right. All right, think about this one. Okay, talk to your elbow partners.

Okay, so what are you going to do with this one? How did you solve this one? Aiden, what did you get?

SPEAKER 14: I got fourteen.

SPEAKER 1: You got 14. Did other people get 14? So we're still in a lot of agreement, great. How did you get 14 on this one?

SPEAKER 14: So there was five and five, and then there was a four.

SPEAKER 1: Okay.

SPEAKER 14: And then five and five make ten, and then you just add the four and it makes 14.

SPEAKER 1: Okay. So let me just capture that here. So the nine is made up of that five and that four? And then the five, of course, was the five. So you put the two fives together to make our 10, all right, and then added the four. Good. Did somebody do it differently, a different strategy to share? Yeah, Calcadan?

SPEAKER 13: So, nine plus five equals 14, because if you add a number to nine, the loose ones are always one less.

SPEAKER 1: Yeah. It's funny, did you see Calcadan turn his head for a sec? Where was he looking? And you're all looking there, too. What is over there? Calcadan, what's over there that you were looking at for a sec?

SPEAKER 13: The purple strategy.

SPEAKER 1: You're purple strategy. That's right. Earlier this year when we were doing one of these lessons, you guys just -- well, it was actually you, Calcadan, who discovered that when you -- you said it perfectly. When you add a number to nine, you felt like the loose ones are always one less.

SPEAKER 13: Because if you add it to 10, then the loose ones have to be one less.

SPEAKER 1: So if I -- so if I took one from the five and gave it to the nine...

SPEAKER 13: Then it would be four and 10.

SPEAKER 1: Yeah, that's that four and 10 that you're talking about. Okay. Great. All right, did you want to add something, Sequina?

SPEAKER 4: I see a pattern.

SPEAKER 1: What's the pattern you're seeing?

SPEAKER 4: When you were doing 16, you did it again, but in a different way. Then when you were doing 14 you're doing it again, but in a different way.

SPEAKER 1: Oh, good. So maybe that's a big idea to think about.

SPEAKER 4: Compensation.

SPEAKER 1: It's compensation, right? That's interesting, that's -- what would you tell somebody compensation is?

SPEAKER 4: It's something where you keep on adding to the other number, and subtraction. And keep on putting it up to the top and the bottom.

SPEAKER 1: Yeah. Does anybody know what's really important with compensation, then? Calcadan?

SPEAKER 13: They don't take one away and not add one, or add one and not take away one.

SPEAKER 1: Are you hearing Calcadan? That's a really big idea. That's, like, a really meaty, big, important idea that you've just explained there. Did someone hear what he said that they think they could say it themselves, too? Could you hear them back there, Mikaila, what he said? How would you say it?

SPEAKER 15: I would say if you don't add a number to the other number, then it won't be compensation. It will just be round them.

SPEAKER 1: Yeah, it's about that balance, right? That balance. You have to do the same to both. All right, boys and girls, this was a fantastic lesson. And what's really cool is it ended on kind of a really awesome, big idea. So let's keep thinking about that big idea. Why don't you give yourself a tiny break to go get a quick drink of water, and then we're going to do some more math together. Okay?