STUDENT: We did it different, we actually drew the people.

LESLIE THORNLEY: Okay, so, explain the pie to me. What are you seeing?

STUDENT: Well, I can't tell, because they didn't really explain the answer that much, but they put like one-fourth people with long hair, one-fourth girls had short blonde hair, one-fourth had short red hair, one-fourth -- and there's eight girls and sixteen boys.

LESLIE THORNLEY: So, can you tell from their poster how many kids had the red hair?

STUDENT: Kind of, yes. Four. Well, it says one-fourth.

LESLIE THORNLEY: It says one-fourth, so what's -- what's the one-fourth referring to, one-fourth of what number?

STUDENT: Of ... 32 people.

LESLIE THORNLEY: Okay. How did you solve the problem?

STUDENT: Well, we actually um -- I gotta check mine.

LESLIE THORNLEY: He said one-fourth of 32. He said this one-fourth stands -- is one-fourth of the 32 people that went to the party. Do you agree with that? Disagree? Give me some signals.

STUDENT: I say -- how could it be half because four-fourths is one whole, so I say how would that be half?

[snapping]

LESLIE THORNLEY: I hear some snaps. So how could what be half?

STUDENT: Like the top, because it says a fourth, a fourth, a fourth, and a fourth. So that should be a whole. And um, two of those should be half. So, that's what I think.

STUDENT: My questions is that it has like two things like, um, with like girls with blonde hair and girls with red hair, they have both short hair and then it only says one-fourth has short hair.

STUDENT: To me, the poster, they should've added the story to the poster so that people can understand it. And like, the people who never did learn the poster, what is the meaning of it -- they should have wrote down the story to understand the answer about it.

LESLIE THORNLEY: This four-fourths is representing what?

STUDENTS: One whole.

LESLIE THORNLEY: One whole group of?

STUDENTS: 32 people.

LESLIE THORNLEY: Is this the boys and the girls or everyone?

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STUDENTS: Everyone.

LESLIE THORNLEY: How about the fourths?

STUDENTS: Girls.

LESLIE THORNLEY: So, this is just the girls. So, this whole, this four-fourths, would be the total number of girls.

STUDENT: But I knew that one was kind of different. It showed me like different steps and diagrams how to do it. Like, they broke it apart in like bar graphs and they wrote how each step they did.

They showed each answer and how, like what -- who has short hair and who has long hair. They go through the part and they show each step, and even though we didn't do a poster, but the way be solved it might have been kind of different, but it's shown a different way.

LESLIE THORNLEY: But take thirty seconds and talk to me about the difference between this poster and this poster over here. Now, I know the words are really small so I'm just going to talk about this for a just a minute. This is labeled "girls with hair," this is labeled "girls with short hair," and this is labeled "the boys." This says 8, this says 4 and 4, and this says 16. How, how does this relate to this poster? Is this clearer to you? Less clear? If so, why?

STUDENT: Less clear because it only has like three diagrams of a fraction table or ... And then, um, like because for 16 it has like one-half of a circle, which makes it confusing.

STUDENT: There's two pie graphs with girls and just a half of a pie graph with boys.

LESLIE THORNLEY: Girls with long hair, this is the girls with short hair, and this is the boys. Knowing that, does it change how you're looking at that, the math?

STUDENT: I don't really get it because there's eight girls and the full circle is filled but when it says 16 boys, there's only half of the circle filled. But like, there's -- 16 is more than eight.

LESLIE THORNLEY: -- part of the, this pie graph, what would you label it?

STUDENT: I'm not sure.

LESLIE THORNLEY: This is what we're going to do, is we're going to walk around the room and we're going to first have no talking, okay, and just walk around and look at the posters. And then I want you to find one poster all by yourself, one poster, and answer two of these questions on the back of this paper. So, why don't you look the questions over right now and maybe pick a couple, just circle. Just circle the two questions that you're interested -- that are interesting to you. That you might like to respond to in looking at the posters.

STUDENT: -- um, presented, would you like to explore further, the last one.

LESLIE THORNLEY: The last question? What mathematics presented would you like to explore further? Kind of a fancy question, huh?

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STUDENT: Which poster do you want to, um, the, explore more, like if you find a poster that you really want to know what it's about you can go and write which one it is.

STUDENT: Cindy had a party. She invited two guests. Her guests each invited four guests and then those guests each invited two guests. How many people at Cindy's party were there? There were 35 people at Cindy's party. Okay.

STUDENT: Brea.

LESLIE THORNLEY: Brea, sorry, forgot. Somebody wrote some comments on your poster?

STUDENT: Yeah.

LESLIE THORNLEY: What did they write? What are you thinking about it?

STUDENT: Um, I'm really curious about this one because I thought that Superman --

LESLIE THORNLEY: What's that one say?

STUDENT: "Carol is in the bathing suit dot, dot, dot, I think."

LESLIE THORNLEY: And what are you thinking about that question?

STUDENT: I really thought that Carol was in the Superman, and that's what my partner thought. Her name's Asia, but she's not here. Yeah, that's what I thought.

LESLIE THORNLEY: So, you want to study it some more and think about it? Or do you think there are -- are you wondering about whether your answer is correct or not?

STUDENT: Yeah.

LESLIE THORNLEY: So why don't you just talk aloud and tell me what's going through your mind right now.

STUDENT: Well, I'm actually curious about my partner's one, because this one just says Mia and Jake is Potato Heads, are Potato Heads, but what my partner thought was the French maid was Mia because she thought that a girl couldn't -- no, a boy couldn't be a French maid, but I thought the French maid was Jeff. That was the whole entire question that I was trying to figure out.

LESLIE THORNLEY: So, where's your thinking, where's your poster?

STUDENT: Right here. That's my side, that's my partner's side.

LESLIE THORNLEY: That's your side, so why don't you explain your side to us?

STUDENT: Okay, so what I did is I wrote the facts all the way up there, and the facts are like really good but the one that troubled me and my partner the most was the one that said, "Jake and Mia arrived and stayed together," and the one that says, "The Potato Heads were always together at the party." So, I thought the Potato Heads were Jake and Mia.

LESLIE THORNLEY: Well, maybe they are. Are you rethinking it or what --?

STUDENT: No, actually, I'm trying to stick with it because if Jake and Mia arrived and stayed together and it says the Potatoes Heads were always together at the party, then that means that Jake and Mia must be the Potato Heads.

LESLIE THORNLEY: So, you're thinking that your rationale makes more sense than this one here.

STUDENT: Yeah.

LESLIE THORNLEY: Okay. And then cutting back to the French maid, even though your partner had Mia, and you had Jeff, tell me why you put Jeff and if you're still comfortable with that answer?

STUDENT: I'm still comfortable with the answer because, um, everyone else were, had a part except for Barbara and Jeff. So, it said ... The first clue was that the -- um, not the first one, but was Barbara was the last to arrive, so I put her as six and the only costumes that were left after I did that was the vampire. So, I thought Barbara was the vampire and Jeff was the French maid because he didn't have a costume yet and everyone else did.

LESLIE THORNLEY: Okay, so getting back to this sticky, which you started talking about, Carol is in the bathing suit.

STUDENT: Yeah, my mom actually --

LESLIE THORNLEY: What do you think?

STUDENT: 'Cause if Ford is the surfer dude and Carol is in a bathing suit, I don't really think she's in the bathing suit. I think Ford is the surfer dude and he's like in, like stretch pants.

LESLIE THORNLEY: [laughs] So, what convinced you that Ford was the surfer dude?

STUDENT: It told, the facts told us, it says Ford was surfer dude.

LESLIE THORNLEY: Okay, and we're just going to put him in stretch pants instead of a bathing suit.

STUDENT: Yeah.

LESLIE THORNLEY: Okay. Anything else you want to tell us?

STUDENT: Yeah, um, it was really hard when I had to figure out the numbers, because right here all of these numbers I had to figure out from the costumes in the -- who was what, so I had to do the who, then the costume, and the last thing I did was the number.

LESLIE THORNLEY: So, you first figured out who was whom in the costumes and then what order they arrived at?

STUDENT: Yeah, because it was pretty hard when they said -- when they were talking about Ford and Carol.

LESLIE THORNLEY: So, you're confident with your order? Or do you want to change anything?

STUDENT: Mmm, I'm confident.

LESLIE THORNLEY: Okay, thank you.