LESLIE THORNLEY: So, what were the questions, and what were you talking about in whispers? You can go ahead and talk out loud.

STUDENT: Well, one of the questions right here is, "I noticed that they use pictures, numbers, and words to help them with the problem." And this one says, "What was hard?" And this one is, "I love the diagrams."

LESLIE THORNLEY: How does it feel to have people commenting on your work?

STUDENT: Good.

LESLIE THORNLEY: What's good about it?

STUDENT: People like our work.

LESLIE THORNLEY: How about you? How does it feel to have people commenting on your poster?

STUDENT: It kind of feels good to me, because, like, usually I'm not really doing posters. Like, I'm not -- I kind of like to, like, draw and stuff. So, I'm not used to doing it on a poster, but seeing people comment -- the poster, that my group did, it kind of -- it kind of feels good to me.

STUDENT: What did you find mathematically interesting? Which is -- One, two, three, four, five, six. Bullet point number six.

STUDENT: I did the same. See.

STUDENT: Two of the same one.

STUDENT: Yeah.

STUDENT: Uh-oh.

SPEAKER: Can you show me that on the poster?

STUDENT: It was this one. We did this one.

STUDENT: What I found interesting is that ... that the pictures look very nice, and I like the way they explained who is who.

STUDENT: Mine is -- I did "what did you find most interesting" too, and I really liked how they did all the artwork, but at the same time, they really -- through the whole poster, they gave their thinking, even through the artwork.

STUDENT: What I found interesting was how they knew when they -- when each one arrived.

STUDENT: I like how they wrote it. They say, "How Dev, Damien," like, all the regular [inaudible] are on the side, and they did the costumes on the other side. And I really like how they did the pictures, how they did it in, like, how they show who came first and stuff like that.

LESLIE THORNLEY: So, Brea, I saw you writing some notes about this Level B poster. And I'm curious about what you were writing about, what you were thinking.

STUDENT: Well, all of these posters actually say the same thing over and over again -- and how they got 32. And I think I have a pretty good idea how they got 32.

LESLIE THORNLEY: Okay.

STUDENT: Okay, so here's all the boys, but we're not really worried about the boys. But girls. Okay, so, in it they had ...

LESLIE THORNLEY: Go.

STUDENT: ... had red hair. They were trying to figure out how many girls had red hair, but everything else -- I got eight too, and so the girls with long hair had one-fourth -- it was one-fourth. And four times four. So, if this is all four -- one, two, three, four. That's four. Times four is 16. And 16 plus 16 is 32. So, I was thinking that they just broke 16 into fours.

LESLIE THORNLEY: So, the 16 is actually being broken into fours.

STUDENT: Yeah.

LESLIE THORNLEY: Not the 32.

STUDENT: Yeah.

LESLIE THORNLEY: Okay, so if we're talking about the 16 being broken into fourths, how many girls would be in each section?

STUDENT: So, here there would be ---

LESLIE THORNLEY: If they were equal.

STUDENT: Here there would be four, four, four, and four. So, they told us about these two, and it was one-fourth, so that's eight, so we're actually just studying on this half. So, we're gonna block this half out.

LESLIE THORNLEY: Okay. So, when you say, "Block this half out," you're saying that if these two fourths together are actually one-fourth of --

STUDENT: Yeah.

LESLIE THORNLEY: Of what?

STUDENT: Of 32.

LESLIE THORNLEY: Okay.

STUDENT: 'Cause eight times four is 32. And four plus four is eight. So, they're in the -- In the passage, they had already told us about how many had long hair and how many girls had short

blond hair. So, what we're really trying to find out is how many girls have red hair and how many girls were left over. And if there's -- Okay, so if they said half of the people at the party were boys, so when they say, like -- So, if we just cut all this out. Like, there'd be [inaudible] something with these and those, we could just have those two over there. And if you break them up -- 'Cause if you put both of those together, that'd be eight.

LESLIE THORNLEY: Both of these fourths would be eight together?

STUDENT: Yes.

LESLIE THORNLEY: Okay.

STUDENT: And half of eight is four, so the girl could add up into four. And, um, there was eight girls left over, and half of eight is four. So, that's how many had red hair, and that's how many had long blond hair.

LESLIE THORNLEY: Thank you.

STUDENT: And four plus four is eight. And that's how they got eight girls. And the 32 is how many people there were. So, all of this here, all of these girls and boys, equals 32.

LESLIE THORNLEY: Wonderful explanation. I liked the way that you talked out loud, and I could really understand your thinking about this diagram, the numbers, and the fractions. What do you think about this representation of the data? Did it help you? Did it confuse you?

STUDENT: Actually, when I first looked at this, I'm like, wow. These -- And I read all the post-its first. I'm like, wow. All of these post-its say the same thing. "Show your work." "Show your work." Like this one, it says they didn't show their work, and I found a ton of them that said, "How did you get 32?" and, "You didn't show your work." But actually, I think I know how they showed their work with this big old pie.

LESLIE THORNLEY: Thank you, Brea.

SPEAKER: Thanks, Brea.