TRACY LEWIS: Do you remember what we did for the first problem? For Cindy's birthday party? Or what did we do, Isaiah? Do you remember?

STUDENT: We tried to figure out how many people was at the party?

TRACY LEWIS: We did, but how did we do it? We did it on paper and we did it another way where we had something happening over here. What else did we do, Harinder?

STUDENT: We fixed people on top of the tables.

TRACY LEWIS: Right. So one person actually got to be Cindy and actually invited two friends and we actually acted it out. Do you think it would help if we try to act this out?

STUDENTS: Yes.

TRACY LEWIS: Okay, let's try to act it out with what we know for sure. What do we know for sure? Are we going to use everybody?

STUDENTS: No.

TRACY LEWIS: No. How many people do we need? How many actors do we need? How many actors do we need? What's something else that we know for sure, Dewan?

STUDENT: Six. We need six actors.

TRACY LEWIS: We need six actors. So, all right. Kellan.

STUDENT: Yes?

TRACY LEWIS: Kellan, pick a friend.

STUDENT: Uhh, Giovanni.

TRACY LEWIS: Okay, Giovanni. Can you do me a favor and go stand in the middle where we usually line up? Giovanni, pick a friend that's a girl.

STUDENT: Oh. Uhh, Nia.

TRACY LEWIS: Okay. DeAngelo and Shanice. Well, do you think we should use this? Use some information here?

STUDENTS: Yes.

TRACY LEWIS: Because Ms. Lewis was trying to be fair, but --

STUDENT: That's five.

TRACY LEWIS: That's five people? Well, let's see.

STUDENT: I could choose.

TRACY LEWIS: Remember, you're actors. You're actors. So where are my actors? My actors need to be over here where I can see you. One, two, three, four, five. You were the last person?

STUDENT: No. Six.

STUDENT: One, two, three, four, five, uhh. Guessing ... Sarah.

TRACY LEWIS: Sarah. I was going to say Sarah.

STUDENT: It's too many --

TRACY LEWIS: Now six. Okay. But they are actors. So right now, are they in the right order? Can you guys move over? Move down so everybody can see. There you go. Are they in the right order? So, so far what we know is that they all came to the party and --

STUDENT: They all were wearing costumes.

TRACY LEWIS: They all were wearing costumes. Okay. Kellan, I see you're trying to organize people. What are you doing?

STUDENT: Try to put it in the right order.

TRACY LEWIS: Well we're going to figure out the right order. We've got to figure out who walked through the -- who walked through the door.

STUDENT: He's sequencing.

TRACY LEWIS: He's sequencing. Very good word. All right, let's see, what do we know so far? Let's start with what Victoria said. What do we know so far?

STUDENT: We know that Jake and Leo arrived, stay together, and the Potato Heads always --

TRACY LEWIS: Okay, so I need someone to be Jake. Okay, DeAngelo --

STUDENT: And Nia.

TRACY LEWIS: And who's going to be -- Nia, would you like to be Mia? Since your name is so close? Okay, so they always -- what?

STUDENTS: Stay together.

TRACY LEWIS: Stay together. Okay, do we know when they came in the door?

STUDENTS: No.

TRACY LEWIS: No. We don't know that yet. What else do we know for sure? Kellan.

STUDENT: That the Potato Heads are -- I forgot.

TRACY LEWIS: You forgot. Ayana.

STUDENT: What we know for sure is that dude was wearing a bathing suit. I mean Ford was wearing a surfer's suit because it says, "The person that arrived first was wearing a bathing suit," and it says, "Ford was a surfer dude."

TRACY LEWIS: Okay, so which one -- what information do we know for sure? Ms. Lewis had something here. I have some labels. Because you told me that good mathematicians use labels and they use words. So, Ms. Lewis has some words. What does -- can you see what this says? What does this say?

STUDENTS: Potato Head.

TRACY LEWIS: That says Potato Head. What does this say?

STUDENTS: Potato Head.

TRACY LEWIS: And what about this one?

STUDENTS: Surfer.

TRACY LEWIS: Surfer dude. So can I give these labels to some of my actors? So we know who

they are?

STUDENTS: Yes.

TRACY LEWIS: Okay. So, you're saying, from what we read on this paper, you know that surfer

dude is? Or not surfer dude. But Potato Head is?

STUDENTS: Mia and Jake.

TRACY LEWIS: But we don't know what order they came through the door yet. Who is surfer

dude? What is surfer dude's name? Do we know what surfer dude's name is?

STUDENTS: Yes.

TRACY LEWIS: Surf--

STUDENTS: Ford.

TRACY LEWIS: Ford. Who would like to play Ford?

STUDENTS: Giovanni, Giovanni, Giovanni,

TRACY LEWIS: Okay, play surfer dude. All right. What else do we know for sure? What else do

we know for sure? What else do we know for sure? Erin?

STUDENT: That Barbara was the last to arrive.

TRACY LEWIS: Barbara was the last to arrive. Can I get someone to play Barbara? Thank you,

Sarah.

STUDENT: Sarah.

TRACY LEWIS: Sarah. So if Sarah is Barbara, that means what order should she be in? Can

we figure it out?

STUDENT: Yes.

TRACY LEWIS: She should be ...?

STUDENT: Last.

TRACY LEWIS: Last, so can you place yourself last? What does that look like?

STUDENT: No.

STUDENT: I think I know what order ...

TRACY LEWIS: Well, I think it would depend on where the door is. Where the door is. And she's looking at the door, she's saying the door is over there. So if they were going out to a party, Sarah would be last. Do we know who came in first?

STUDENT: Yes.

TRACY LEWIS: Oh wait, Giovanni, what were you saying?

STUDENT: That she's the vampire, because it says "The vampire arrived after Superman."

TRACY LEWIS: "The vampire arrived after Superman," but why do you know that she's the

vampire?

STUDENT: Oh, I know why.

TRACY LEWIS: What are you thinking?

STUDENT: I'm thinking --

TRACY LEWIS: Let him finish his thought.

STUDENT: It said, that Superman arrived right before Barbara.

TRACY LEWIS: Superman arrived right before Barbara. So ...

STUDENT: So Barbara's Superman -- No, Barbara's the vampire, and somebody else is

Superman.

TRACY LEWIS: And somebody else is Superman. Okay, so I think they're doing some rearranging and some figuring out. So what Ms. Lewis has for you is I have Superman. I have a title that says Superman.

STUDENT: I'm vampire.

STUDENT: Giovanni is the Superman.

TRACY LEWIS: And right, now Sarah says she thinks she's the vampire.

STUDENT: Yeah because I came after Superman, and it says Barbara came right before Superman, and Superman came after vampire, so I'm vampire, and somebody else has to be Superman.

TRACY LEWIS: Does that make sense to everybody?

STUDENTS: Yes.

TRACY LEWIS: Yes? Or kinda-sorta? Or "I'm not sure"?

STUDENT: It said that I came after.

TRACY LEWIS: "I'm not sure," okay. So this is what Ms. Lewis is going to do. So far, we know we have how many people?

STUDENTS: Six.

TRACY LEWIS: We have six people, and I think you figured out that Jake and Mia are supposed to stay ...

STUDENTS: Together.

TRACY LEWIS: And we figured out that they are probably Mr. and Mrs. ...

STUDENTS: Potato Head.

TRACY LEWIS: Or the Potato Heads. We know we have a vampire, but some people are saying, "Yeah, maybe the vampire's Barbara," or "Ms. Lewis, I'm not sure, I think it might be somebody else."

STUDENT: Do I need to explain it a little better?

TRACY LEWIS: No, we're going to figure it out. We know we have a maid.

STUDENT: I wanna be the maid.

TRACY LEWIS: Okay. And since Sarah thinks that she's the vampire, we're going to let her hold that. So, who's Superman?

STUDENTS: Giovanni.

TRACY LEWIS: Oh, maybe Giovanni's Superman, I'm not sure. Who's wearing the bathing suit?

STUDENT: Oh, I wanna change it.

STUDENT: I'm wearing the bathing suit.

TRACY LEWIS: Ah, so so far, we've figured out that you -- we know what he's wearing because he's surfer dude, he's got on the bathing suit, and we know their names. That's all the information that we could -- we know for sure so far. How many people are going to this party in the costumes?

STUDENTS: Six.

TRACY LEWIS: Okay, so we know that there are six people. So here's what you're going to do - thank you very much actors, you can have a seat.

STUDENT: But I'm wondering who made the costumes.

TRACY LEWIS: You're wondering who made the costumes?

STUDENT: The tailor.

TRACY LEWIS: Or who decided to have a costume party. Do you think that's important to figure out what order they came in thought?

STUDENT: Yes.

TRACY LEWIS: Do we need to know that information to figure out ...?

STUDENT: Yes.

STUDENTS: No.

TRACY LEWIS: Some friends say no, some friends say yes. Have a seat real quickly because I'm about to put you to work. Are you ready?

STUDENTS: Yes.

TRACY LEWIS: I'm sorry, I'm standing in your spot.

STUDENT: Ms. Lewis, do we keep these?

TRACY LEWIS: I'm going to tell you right now, as soon as I have everybody's attention. Three -- Thank you.