

Class Transcription

Teacher: I want to start by asking you to take everything off your tables please, so that I can have your full attention. Put it either under your chair or off to the side somewhere. I'm going to ask you to help me with a problem that I have. I had an interesting experience over the weekend. I, um, was gonna go buy a pair of tennis shoes and I'm looking around the room and I see that almost everybody in here has them on except for me. I went to Foot Locker, have you ever been there? And so, I walked into this huge store, and there were just, like, tons of boxes that went to the ceiling, and so this really nice person working there started asking me all these questions about what kind of shoe I wanted. And I didn't know that there were so many things that went into a decision about how to pick out a shoe! So, I kind of got embarrassed and I just said, "I'm going to go away and think about this and come back". And then I remembered that when I was in here last week I was kind of looking around and thought, these guys all wear tennis shoes so they know this. So, I assume when you go buy a pair it doesn't take you forever, that you kind of have some things that are important to you when you go buy tennis shoes, is that true? Lauren is shaking her head yes, Kristen is saying yes. So, what I would like you to do is help me generate a list, of about, I don't know, eight or ten things that you think are important when you're buying a tennis shoe. These are things that YOU think about and then what I am going to do is to try to use this information and maybe help me make a better decision when I go back. So, Lauren, you've got one right off the bat.

Lauren: It can't be Nike.

Teacher: It can't be Nike, so can I put brand? Can I put brand down? So, you would, one of the things you would want to look at would be the brand of shoe, okay? Trey, what about you?

Trey: The size.

Teacher: The size, that would be important. Okay, Caleb, what about you?

Caleb: Comfort.

Teacher: Comfort. Oops, it would help if I spelled it correctly. Okay, Henry, did you have one?

Henry: Price.

Teacher: Price. Austin?

Austin: Type, like basketball or running shoe.

Teacher: Okay. All right. Yes, Alec?

Alec: Style.

Teacher: Style. Let me ask you a question, is that different from type?

Class: Yes.

Teacher: Okay, so I need to think about that. Wow, this is getting complicated. Adnan?

Adnan: Quality of the sneaker.

Teacher: Quality. Okay, how are we doing? Yes?

Student: How the shoe looks on you.

Teacher: Looks. Okay, so this is a pretty exhaustive list. Now, everyone feel pretty comfortable with this? These are the things you would take into consideration? Now, okay, so, if I go back out there with my list, it would probably be helpful if I had some idea of which ones of these things you think are more important than the other. Does that seem like a reasonable thing? So, I guess what I am going to ask you to do, is I'm going to ask you at your table to come up with a way to rank each of these, or rank this whole group, with number one being the one you think is most important and one, two, three, four, five, six, seven, eight, number eight would be the least important. So, you will have them in a rank order, so I can take my list and I can say the group said number, whatever, is the most important as I'm making my choices. Does this make sense, what I want to ask you to do? I'm going to give each group a sheet of paper and I've got it folded double, so that the marker won't come through on the table. So, if you would just put your list on this sheet of paper, then we're gonna to post them on the board and compare, okay? I am going to pass out markers and paper for each of the groups.

Group #1 from left to right: Adnan, Alec, Emily, Patricia (*working on their list*)

Alec: Size, size needs to be the first.

Adnan: Quality! Don't you want your shoes to last longer than

Alec: But, don't you want the right size where they last?

Girls: *Giggle*

Emily: Where you can wear them for a long time.

Adnan: Don't you have to find out what quality it is because there are tons of shoes in different sizes, right? You find the right kind of shoe that has a good quality and then you look for the sizes.

Patricia: That's true. I think price shouldn't really matter right now. You should think about all you really want in a shoe.

Emily: You're making me mark on it.

Alec: Marker doesn't erase.

Emily: Well, duh!

Adnan: Try harder.

Patricia: I have a big eraser.

Alec: Uh oh, I put a hole in the paper.

Emily: Okay, price doesn't really matter right?

Patricia: Right, it doesn't matter right now.

Adnan: Quality should be, quality because you have to figure out first the comfort. There's tons of different sizes.

Alec: God, I hate that noise.

Patricia: I don't like the sound of that thing...

Adnan: Man, don't press so hard, it's making that sound.

Alec: I got cold chills.

Adnan: My teeth hurt.

Emily: Okay.

Teacher: Got a plan?

Patricia: Kind of.

Emily: We're just debating about each one.

Alec: Size! Size!

Adnan: Then size.

Alec: Size!

Emily: Okay, size.

Patricia: I think style and looks should be last.

Adnan: Looks, I think looks should be last.

Teacher: You think what (*asking Patricia*) ?

Patricia: I think that style and looks should be near the end.

Teacher: Okay, that's what you said right (*asking Adnan*) ?

Adnan: Right.

Alec: Style should be six!

Patricia: Style? I think looks should be six.

Alec: Because you wrote it.

Patricia: No.

Alec: Yes.

Adnan: Then it's price.

Emily: Price, yeah.

Group #2 from left to right: Monique, Shawn-Marie, Sarah (*working on their list*)

Monique: Brand.

Shawn-Marie: Brand would be second.

Sarah: It should be comfort.

Shawn-Marie: Because after you find the type then you look for

Monique: Comfort.

Sarah: Comfort—how it feels on your foot.

Monique: Would you look to find out what type of shoe you want to be, you would find the comfort of it though.

Shawn-Marie: But first I would have it in brand sections, like Nike then Fila, and then you could go into size and the detail of what you want.

Monique: So, brand.

Teacher: So, is this your number one and this your number two(*pointing to their list*)? Would you stick numbers on them for me? So I can keep them straight. Thanks.

Shawn-Marie: Right. Next the comfort or the fit?

Sarah: Comfort.

Monique: You got to get the size first, you can't pick out no size

Shawn-Marie: Without

Monique: three then put it on your foot, it's not going to be comfortable.

Shawn-Marie: Okay, style.

Monique: Then comfort.

Shawn-Marie: And then the price.

Sarah: No, then the quality.

Shawn-Marie: No, before you get into all the looks and the details you need to be looking at the price to see if you can afford it, if not you can move on.

Monique: What do you mean by quality though?

Shawn-Marie: Like how good it is, if it's going to last, if it's a good brand.

Monique: So you, price would be included with quality though.

Shawn-Marie: No.

Sarah: Just put down quality

Shawn-Marie: Put down price! Girl, who do you like better?

Sarah: If it's a good shoe, if it'll fit, and it's expensive and you want then you should just keep it.

Monique: But if you're looking for a bargain you would.

Shawn-Marie: Yeah, before you start into quality you need to know if you can afford it.

Monique: Yeah, yeah, no price (*she writes it down*).

Shawn-Marie: Then quality.

Group #3 from left to right: Nick, Caleb, Austin, Henry (*working on their list*)

Caleb: We're trying to decide which ones first, size or price. We say price because even if you have your own size and they're \$300, you're not going to buy the shoe. They say size.

Henry: 'cause if you have the right, if you have everything right but its like \$300 you're, you're not going to spend that much money.

Caleb: Even if it is the right size.

Nick: Still, it's the right size. Without the right size it won't feel good.

Caleb: How about size is number two?

Austin: Hey, I'm changing, all right how about going to comfort? Yeah!

Teacher: How about a different way?

Austin: Now I changed to comfort and they

Teacher: You changed to comfort?

Austin: Yeah

Teacher: You're going to make it worse, huh?

Austin: Yeah, see, but they outnumber me.

Teacher: What if you put the numbers one to ten and maybe what you thought was the least important, do you think working backwards might help?

Group: Yes.

Teacher: Because you can't seem to agree on the top one, so maybe if you eliminate some of the choices.

Henry: Okay, What's the one that you wouldn't even think about? I think type.

Nick: Yeah, type.

Henry: Because I can be playing basketball with running shoes.

Nick: I know.

Henry: I don't really care about the type, I mean come on now.

Austin: We always get basketball or running shoes.

(Caleb made an error writing)

Henry: It's all right, don't worry.

Austin: Don't, now it looks ugly.

Henry: It looks ugly.

Caleb: I don't care, eight is type.

Austin: I always get running shoes or basketball shoes.

Henry: Yeah, I think type.

Austin: Wait. You didn't even think

Henry: Be quiet man, Austin.

Austin: negotiate.

Caleb: I think seven is style.

Henry: No.

Austin: No way, man.

Nick: Style is kind of important.

Henry: You could have some ugly looking New Balance.

Austin: I say

Caleb: No, brand.

Austin: Quality.

Caleb: Brand is that. Style is the style of the brand

Austin: Yeah, and Nike

Caleb: either black tennies, or white tennies, or red tennies

Austin: Red tennies?

Henry: Red? That 'll be cool. Yeah, I think style. Wait (*looking for agreement*) .

Caleb: Style, style? Style. S-T-Y-L-E. Sixth?

Austin: Looks.

Nick: Say, number four, like, would be brand.

Caleb: No way.

Austin: Looks.

Caleb: What's after, before style?

Austin: Looks.

Caleb: Before style?

Austin: Looks!

Caleb: Looks, you all say looks?

Henry: Yeah. (*Nick nods in agreement*)

(Students were asked by teacher to add their names on paper; teacher collected papers after they were finished.)

Teacher: *(tapes posters on bulletin board)* All right, if you are finished and I have yours up on the board, see if you notice something that's happening here, besides the fact that they won't lie down. Oh my gosh, so we have a problem, don't we? Did you all hear what Laura said? Can you say it again loudly for them please.

Laura: Almost nothing is the same.

Teacher: Almost nothing is the same. So what I'm getting are some lists which are not in agreement on how these things are ranked. Does that surprise you that the lists are different, or do you think that's reasonable?

Class: Reasonable!

Teacher: Well, let's have, raise your hand please if you have a comment. Caleb, what do you think? Are you surprised by that?

Caleb: No, because everybody in here has different opinions, so it's like everybody should have different things because, um, if we all had the same answers it would be kind of weird.

Teacher: It would be kind of weird. Sure would make my job easier, though. Wouldn't it, if you all solved it the same way?

Henry: Sorry.

Caleb: Yeah, but it wouldn't make it as interesting.

Teacher: That's, that's true. It wouldn't make the problem as nearly interesting. So, can you imagine what I am going to need your help with now?

Henry: Narrowing it down.

Teacher: What do you mean by narrowing it down, Henry?

Henry: Like I said, to narrow it down to see what you're really going to look for as soon as you walk into the store, before you look at everything else.

Student: That's right.

Teacher: You agree with that?

Student: Yes.

Teacher: Okay. So, I guess as I look at these, wow, that's a lot of difference in there! Some similarities. I see some similarities, like this group and this group and this group, well, two groups had comfort as one, that one had comfort up on the top. But, some of these don't agree so I'm not really sure, like, for instance, brand is four here, but down here they thought it was eight. So I guess what I need you to do is figure out a way to take everybody's list and come up with one list for me that's ranked in order from most important to least important. They are all important things because these are things that you said were important. But, what would be the number one most important and Caleb, I don't want you to tell me a way because I'm going to ask everybody to do it, but if you have a question or comment? Okay So what I am going ask you to do is in your groups, I'm going to ask you to look up here at each group's way, each group's list, and think about how you might come up with one list for me of these eight items in order from most important to least important. Now this is based on these reports. I am NOT asking you to just give me another list. Like Paul and Jason, I am not asking you to make another list now. I'm asking you, for me, to make a list that takes into consideration what everybody did. Do you think you might be able to come up with a plan that would do that? Trey, do you think you could?

Trey: Maybe average it out?

Teacher: Okay, I don't want you to tell. Okay! But I just want you to have some ideas. So I want you to think about different ways you might do that at your table and then I'll come around and talk to you in if you have any questions about this. So I'm going to bring you some paper.

(Students talk together about it. They are getting paper and pencils.)

Teacher: Austin just asked me a really good question. He said, "Do we just come up with a way?" So, I guess I didn't ask my question very well. Yes, you need to come up with a way, but you need to use your way to actually generate me a new list of these things ranked one to eight. So, I'm going to be interested in the list, but I'm really going to be interested in the way that you came up with the list. Henry?

Henry: So, each of us will make one list?

Teacher: No. At your table.

Henry: Then the groups will make one?

Teacher: No, at your table you can do this as a group. So, one for your group. Now, let me tell you this. Let's suppose that you guys are working and you totally disagree with the other people at your table and you think of a different way you'd like to do this. That would be okay, but, if you're all working together and you all agree on one way, that's fine. You can do one as a group. So, I want you to talk about it at you table, okay?

Group #1 from left to right: Adnan, Alec, Emily, Patricia (*working on their second list*)

Adnan: Say, comfort. Two of them are ranked as number one, right?

Patricia: Right.

Adnan: Then there's one ranked at number two, then one's at five

Alec: I go with Adnan.

Adnan: Then one's at four, then another one's at two, so they're mostly ranked at number one.

Patricia: I agree with that.

Adnan: Comfort is more, than size, you can see, or you can put size for number one because you can get, first you get the right size then see which in that size, which shoe has the most comfort.

Patricia: My idea kind of goes with yours almost exactly. But suppose first we do number one and after we try comfort for that one, I'm thinking maybe that would be number one, then look at all the two's and see which one comes up there. But comfort couldn't be in the running because comfort would be number one.

Adnan: I'd say size would be number one.

Emily: Yeah.

Adnan: First you have to find the right size, then you could look for which shoe in that size feels comfortable.

Emily: And then I think it would be quality.

Adnan: Yeah, quality is like, because you do need a good quality shoe.

Alec: But we aren't, we aren't doing, we aren't doing the list, we're doing it from these lists.

Adnan: I know but look, quality, but still quality is sort of up there.

Emily: More people said size for number three than anything.

Alec: Yeah.

Emily: But size is number one.

Alec: But price, price is up there. Okay, we need to pick which one is more, quality, I mean price.

Adnan: It's price.

Alec: Price or style?

Adnan: It's price.

Alec: Price

Adnan: Actually it's more often than quality, so then price, then quality should

Emily: So, number three is price.

Alec: And then style for number four because style is up there with price.

Emily: Brand, price, price, quality, quality

Adnan: Style, then quality.

Alec: Quality then style because you need a good lasting shoe.

Patricia: Yeah.

Adnan: First you have to find out, from like say if you ask someone if it's a good quality shoe.

Emily: Quality

Adnan: Then you'll get what kind of style, because there's a lot of different styles and they all have got different qualities.

Teacher: (*came to the table*). So, did they go along with your plan?

Adnan: Yeah.

Teacher: So is it working?

Adnan: Yeah.

Teacher: So tell me specifically, like how you're going to find what's number six?

Adnan: Okay. First, we've already got done the first top five, so we don't have to use those anymore.

Teacher: Right.

Adnan: So then we'll just look at the ones we didn't use

Teacher: Okay

Adnan: and see which one came next. The first one, looks is number six, but then the second one, looks is number seven, but over there, looks is number two.

Alec: I have an idea for the last three.

Teacher: What's that?

Alec: I say we add up, we take

Adnan: Yeah, you can do it that way too.

Alec: the first one looks, and then it's a six for looks, then the next one is a seven for looks

Adnan: Add them up.

Alec: and you add them up and then the one with the least you put for six, and the second least you put for seven.

Teacher: That's a nice idea. What do you think about that?

Patricia: Yeah.

Emily: Yeah.

Adnan: Yeah.

Teacher: All right. Do you think your first ones would change if you used that method on your first ones?

Alec: Yeah.

Adnan: Probably.

Alec: They'd change a lot. We need to redo it.

Teacher: You might want to. Can I suggest a way to make it maybe quicker? Maybe, Emily you could take size, Patricia you could take comfort, you could each take a different one and see what it adds up to be, so you wouldn't have to all add them up.

Alec: So there's eight, so we each get two. I'll take size and comfort.

Adnan: I'll take price and quality.

Patricia: I'll take, what are you taking?

Adnan: Price and quality.

Patricia: I'll take, has anyone already taken style? I'll take style and

Emily: looks

Patricia: looks, I think someone's already took looks. Adnan, did you take looks?

Alec: No.

Emily: I'll take brand and type.

Alec: He took price and quality.

Emily: I'll take brand and type.

Patricia: I'll take looks and what else am I taking? Looks and comfort.

(They begin their calculations)

Adnan: That's twenty-two and we have seven categories. Seven divided by two, twenty-two would be three at least. Right? Twenty-one?

Alec: We aren't dividing them.

Adnan: Yes.

Alec: No, you're not. The one that has the least, the least total is first and then you order least to greatest.

Adnan: No. Dividing is getting the average.

Patricia: By total, do they mean the rank on the places up there?

Emily: So your idea (*asking Alec*) was not to divide?

Alec: No.

Emily: Just get the totals?

Alec: Just get the totals and the one that's least is first, second least is second, and so on, and so forth.

Emily: Oh, okay. That's a good idea.

Group #2 from left to right: Monique, Shawn-Marie, Sarah (*working on their second list*)

Monique: I think type should be first because when you go into a store and you need a shoe for basketball, you're not going to go straight to the cross training section and find a shoe for Converse.

Sarah: Yeah, but if you look at all the lists, type towards the bottom of all of them.

Monique: That's true but, that's like if you're not looking for a particular type of shoe like.

Shawn-Marie: I still, I think it's a brand first 'cause you can go straight to that brand station and find out, okay, I know I want Nike

Monique: But, but

Shawn-Marie: because I like Nike. I've seen it, people have, people do good with it and

Sarah: Okay.

Monique: But in those type of sections they don't have, like, if you're going to Just For Feet, they have cross training sections, then they have basketball sections, then walk, I mean running

Shawn-Marie: But it's not like it's all mixed up though, I mean and there's like Filas and there's like everything

Sarah: Okay, I think, okay, let's just skip over the first one. I think number three should be size.

Shawn-Marie: You can't do that, Sarah.

Sarah: You can skip over the first one.

Monique: You can't do that. If we skip over the first one

Shawn-Marie: Well, I think it could be type.

Monique: I think type.

Sarah: Okay.

Monique: Because if you go into a store, as soon as you go in there they ask you

Shawn-Marie: What type of shoe are you looking for?

Monique: What type of shoe are you looking for, cross training and stuff like that?

Sarah: I don't think brand should be second.

Shawn-Marie: Yeah it is.

Sarah: That should be towards the end.

Monique: It is? Like if you're doing a sport, unless the customer asks for a certain type of brand, and usually they won't, if there's no type of brand

Sarah: You can get any

Shawn-Marie: I think brand would be second.

Sarah: I don't.

Monique: I don't think second.

Shawn-Marie: Because after you know what you want, basketball shoe, cross trainer, or whatever kind you want

Sarah: It doesn't matter.

Shawn-Marie: you want to go to brand and then you'll look for style.

Sarah: It doesn't matter what brand it is.

Monique: But let's say you want basketball shoes and you know basketball shoes are very high, so your parents are going to be like

Shawn-Marie: But let's say you don't

Monique: you go up to them, I like this one, I like the style of this one and they'll be, like, how much is it?

Sarah: I think it should be the best quality, I think

Shawn-Marie: I think price should be like fourth or fifth.

Sarah: Price should be third, I think quality should be second 'cause it doesn't matter about the brand, it's like how good it is.

Monique: But, it depends on how much they're willing to pay, your parents or whatever if...

Shawn-Marie: Since we have an extra sheet of paper

Monique: Price should come before quality.

Shawn-Marie: Hey, since we have an extra sheet of paper how about we just write down what order we think it should be in and then talk about it as a group and then write it down on one sheet of paper if we agree.

Teacher: And then how would you come up with your individual lists? How would you do that?

Shawn-Marie: Well, you'd just sit here and think about it yourself and then we could discuss it as a group and write it on this sheet of paper.

Teacher: But, are you gonna, are you gonna use these?

Shawn-Marie: Yeah

Teacher: Okay, so you'll do that to come up with your individual ones, is that what you're saying?

Shawn-Marie: Yeah.

Teacher: Okay.

Monique: I'm done.

Shawn-Marie: I guess I should put size in here somewhere.

Sarah: Okay, we all have number one.

Shawn-Marie: Hold up.

Monique: We all have the same word.

Shawn-Marie: Who's going to write on the group paper?

Sarah: I'll write.

Shawn-Marie: Okay, Sarah can. I got the next right, if you all gonna let me. Okay, I put number two is brand.

Monique: I put price.

Sarah: I put comfort.

Shawn-Marie: Okay, now each of us has to give a reason why we picked that.

Monique: I have two of mine, three and four that I kind of want to change.

Shawn-Marie: Okay, and if your reason is good enough maybe one of us will change our mind.

Group #3 from left to right: Nick, Caleb, Austin, Henry (*working on their second list*)

Henry: Whichever one is most used up to that number, like within a two number range should be

Austin: I say averaging.

Caleb: Yeah, I say to average it 'cause look

Austin: Don't forget to . . . average, Caleb

Caleb: Listen, you have one, four, four, two, wait. One, four, four, two, three, five. So, all this added together is eight, ten, eleven, fourteen, nineteen. So, nineteen divided by one, two, three, four, five, six.

Austin: That's three.

Caleb: That's three. So, basically we could say that price would be three.

Nick: Yeah. That's what I was thinking.

Austin: Right, no, but no, we wouldn't write down three, 'cause then we'd have to go through and that might be number one. That might have the best ranking. See what I mean?

Caleb: What do you mean?

Austin: 'cause see, 'cause the others might have others that bring them down and their below it, see 'cause we might get a 3.5.

Nick: So that would be four.

Austin: Yeah, but, so we don't know yet so we might as well write them all down and then we could see.

Caleb: Yeah you're right, but also you're right because we're going to average, but I found a problem, some of them might end up being the same average, like you have a 3.1 and a 3.4.

Austin: No, but see that you can, the 3.1 would be just a little bit better than the 3.4. See, you can put 3.1 before 3.4 in the ranking.

Teacher: But 3.1 is a smaller number, why are you saying

Austin: I meant the other way around.

Henry: No, but if it was 3.4

Caleb: It would be closer to three which would be

Henry: Yeah, 3.1 is closer to three,

Austin: the smallest number

Henry: 'cause 3.4 is closer to four

Teacher: Don't let me confuse you if I ask a question. So, which one's better 3.1 or 3.4?

Group: 3.1.

Teacher: Okay.

Caleb: So we can do that.

Austin: I thought that, I thought

Teacher: I didn't mean to confuse you.

Henry: So price is three.

Caleb: No way, let's write them all down first.

Austin: That's what I have done.

Henry: Price, um, four

Austin: How many groups? Six.

Caleb: Brand, quality

Austin: Comfort is 2.5

Nick: So, you're saying the smaller the numbers the bigger the

Henry: Yeah, because if you have a 1.1 and a 1.5, 1.5 is closer to two.

Caleb: Closer to two.

Nick: Yeah, okay.

Henry: See, I'm smart in the head.

Caleb: What's type?

Henry: I'm smart in the head.

Teacher: How's it coming?

Henry: Cool beans.

Caleb: It's coming pretty good.

Austin: 5.83.

Caleb: Just put 5.8.

Henry: What is that for? Type.

Caleb: Just put 5.8.

Henry: Type is 5.8.

Caleb: Now brand.

Henry: Brand is four, eight, (*and Caleb*) one, five, eight, and two.

Austin: 4.6., it's actually 4.67.

Caleb: Okay, so what's the one? Listen up, the one closest to one is comfort so comfort

Austin: and then price

Caleb: So then, do it, do it one at a time! Hey, one at a time.

Austin: Okay, comfort is one, price is two, size is three.

Nick: What did you just say?

Austin: Size.

Nick: Size, yeah.

Caleb: Size, yeah.

Austin: Quality is four.

Caleb: No, No.

Austin: Yeah.

Nick: Yeah.

Austin: Then brand is five, type is six, then seven and eight, style and looks. I can't believe that seven and eight, style and looks; that's pitiful. What's happening to today's world?

Henry: Shut up, man.

Austin: Kids not liking the style or the brand of the shoe.

Henry: I'm going to beat you.

Caleb: Look at style and looks up there and see which one is usually towards the bottom.

Austin: Well, that's the thing, they're both, they're exactly. We just did that.

Caleb: You're right.

Henry: No, but which one is the last one most, would be the last.

Caleb: Yeah, style

Henry: Looks.

Austin: Let's just put, what did we put first? We put looks is better, so let's just put looks is better that's what we think.

Henry: Why?

Austin: That's what we like and who cares about other people.

Henry: Yeah, looks is what, last?

Austin: Yeah, no

Caleb: We can't do

Austin: No, looks is better than style.

Caleb: Okay, fine. Looks, then style.

Austin: Okay, so we make our list.

Caleb: S-T-Y-L-E (*as he is writing*)

Nick: Okay.

Henry: I hate how we are always the first one done. (*while they are waiting for the teacher*)

Henry: (*Doing calculations*) one plus two plus three plus four plus five plus six plus seven plus eight divided by eight equals

Austin: three, three, three, three, three, three, one (*saying to Nick*)

Nick: I get it. I wasn't contradicting your way of thinking.

Austin: All right let me tell you something, stop listening (*addressing the microphone*)

Henry: (*still calculating*), 4.5, wow, look, man

Austin: Get away (*addressing the microphone*)

Henry: Look, Austin, man

Austin: Get away, get away

Henry: Austin man, Austin, Austin man

Austin: The government is watching us.

Henry: Austin, man, if you add all these together and then divide it by eight you get 4.5. That's the overall average.

(The teacher brings the class back together.)

Teacher: Okay, I want to talk about your different ways, and I wanna start with this group right here at the front table. So, does one of you all want to be the spokesperson for your group? (*the group discusses*) Is Becca gonna do it? Okay, so what she's gonna do now, let's think about what your job is while she's talking. What's your job while she's explaining her way?

Students: Listening.

Teacher: Listening, and trying to make sense of what she's doing. If you have a question you raise your hand, and Becca, what's your job?

Becca: To explain my answer, and to give you the list and to speak quietly, I mean loudly.

Teacher: Loudly, that's right. You want to speak in a big voice. So, why don't you come up here and tell, can you do it from up here? Do you mind?

Becca: We took the frequency, or the average amount of, um, I guess you can say types that you chose for each one. Such as number one we took the greatest amount of the same, um, word I suppose and we averaged them out and came up with the frequency of one through eight. And number one we got comfort, number two we got price, number three we got size, and

fourth we got quality, number five we got type, number six we got style, number seven we have looks, and number eight we have brand. And that was the complete

Teacher: Okay, so, I want to go back to what she said. She said they took the frequency and they, did you say

Becca: the greatest amount of everybody's answers and, um, whatever the greatest amount of answers the word was we wrote down, we wrote that number.

Teacher: Now, here's my question to you, do you understand what she's talking about, and if you don't is there a question you could ask to help you understand better their way? 'cause I'm not sure I'm real clear, when you explained to me when I was there I did. Yes, can you help us, maybe?

Alec: Can you explain again, maybe a little bit louder?

Becca: Okay. Um, we looked, um, at, I guess, number one, and we looked at the answers that everyone had and the greatest amount of whatever answer that it was, it was the most that popped up, we wrote down and that was the word that we chose.

Teacher: Caleb.

Caleb: So, you're saying, I'm just making this up, so you're saying like if there were four prices, like for price, if four people had one and one person had two, you would just take the four ones?

Becca: Yes.

Caleb: Okay.

Teacher: Yeah, so if I could look at your sheet. They've got comfort for number one. Now look up here they said price, brand, comfort, and then over here it was comfort, size, type, so comfort appeared most in slot number one, so we got number one, okay? Questions about, were there any comments, yes, Tiffany?

Tiffany: Yeah, like that's how our group started out, but in number two you also had two comforts so how did you decide which one it goes?

Kristen: We like, um,

Teacher: Big voice now Kristen, you're gonna have to speak

Kristen: We, the ones that we already had we like disqualified, I guess you could say. We didn't use those. We didn't count those.

Tiffany: Okay.

Teacher: So the first time it came up was when you did it and when it came up later, you said we've already done it so we don't worry about it this time. Okay, good question. Anybody else have a question for this group?

Laura: On brand

Teacher: Big voice now.

Laura: On brand, the reason it's number eight is because it appeared in a lot of different spots, but it only appeared there like once and there were a lot more, so it kept getting pushed down by all the other things

Teacher: Yeah.

Laura: so it finally ended up in number eight.

Teacher: So you saw it at some places, but never at the same place on any multiple reports. Okay. Nice. Thank you. Okay, so let's get, um, yes, you want to do it, Alec you want to do it? Big voice.

Alec: The way we found, um, the, um, to rank them is we took, we each got two of the categories and we added up all the, there was one through eight and say there was, this was brand, we'd look at brand as one and then brand is four so that would be five and then we'd end up adding them all up and the one with the least would be the first and then the second least would be the second, and so on.

Teacher: Okay, so let's do an example. You said the brand. Let's just, can we just take brand? So brand would get how many points?

Alec: That's one for here, four for the next one, eight, and then five, and another eight, and a two.

Teacher: Okay. Do you understand where they got these numbers? Anybody have a question about where they got these numbers? Then we added those up.

Alec: Twenty-eight.

Teacher: Ten, it's twenty, thank you. So, then they did that for every one of the items. Then how did you decide?

Alec: Um, the item that had the least it would, um, be first and then the second least would be second, because it

Teacher: You faded off on me, you faded off on the because part. You said the least would be first, why would the greatest be first?

Alec: Because the greatest means it would be, um, closer to the bottom of the list and then the least would be towards the top of the list.

Teacher: Do you understand what he is saying? Yes Austin, you have a question?

Austin: I just wanted to see his list, the order of them.

Teacher: Can you read it out to them, I'm not sure they can see it?

Alec: Um, I got, for one I got comfort, for two I got size, for three I got price, for four I got brand, for five I've got quality, for six I got type, for seven looks, and for eight style.

Teacher: Okay, I'm at three, start with four.

Alec: Uh, brand.

Teacher: Okay.

Alec: Quality.

Teacher: Okay.

Alec: Type.

Teacher: Okay.

Alec: Looks.

Teacher: Okay.

Alec: And style.

Teacher: Now Austin, why did you want to know his list?

Austin: Huh?

Teacher: Why did you want to know his list?

Austin: Because the way, I just wanted to see if it would be any different from when we did the same thing but then we averaged it, we divided it by eight, how many numbers and I wanted to see if how close it was to ours if any changed.

Teacher: How close was it to yours?

Austin: It was pretty close.

Teacher: Well, I want to know exactly how close it was. Can you give me your list?

Austin: Okay, uh, one was comfort, two is price, three was size, four was quality, five was brand, six was type, looks, I mean seven was looks, and eight was style.

Teacher: Okay, so let's see. We're coming up from the bottom, we've got a difference. These two are swapped and these two are swapped. Right? Now, thank you very much, nice job. So let me, let me, Caleb?

Caleb: Yeah.

Teacher: Go ahead.

Caleb: I was wondering

Teacher: Can I ask a question first?

Caleb: Yeah.

Teacher: Okay, these, this group right here added up the points by taking what their rank was. Right? You just got the total. So this group just found the sum. Do you know what I mean by sum?, Sum, you know what sum is? Okay, and this group found the average. Now, would you think that these would be identical or would you think there would be some difference. Austin, you had a speculation or you would never have asked the question. So you were wanting to know how close.

Austin: Yeah. I thought they'd be pretty close because I didn't know how much the dividing by, dividing, by eight that we did would make a difference in the order that they were.

Teacher: So, what do you think about what Austin's saying, that if this is just the sum and then they took those sums and divided by eight that there would be some difference? Caleb, what?

Caleb: I thought we divided by a different number, never mind.

Teacher: That would make a difference if you divided by a different number. Did you all divide by eight?

Group: Yeah.

Teacher: Are you sure, Henry?

Caleb: *(nods)* 'Cause Austin did it on a calculator.

Teacher: Ah, he did it on a calculator. Okay, so do you wanna, do you wanna share your way?

Caleb: Yeah.

Teacher: Can he get through there guys?

Caleb: Um, basically we did the average

Teacher: Big voice now 'cause we got the air on, so you gotta

Caleb: Um, we did the average, like Austin said, but if we got a number like say 2.5 for, well for comfort we got 2.5 and then we got, I'll just go ahead and tell

Teacher: Sure.

Caleb: For price we got 3.1, size 3.3, quality 4.5, brand 4.6, looks 6, style 6, and, um, type 5.8.

Teacher: Okay.

Caleb: Uh, uh, actually brand was 4.6, oh yeah, never mind.

Teacher: Sure? Have everything right?

Caleb: Yeah, 'cause it's kinda

Teacher: Yeah, you're right. I'm sorry.

Caleb: Um, so the way we did it is the lowest number was number one, which was comfort. Then the second lowest number and the third lowest number, and

we determined this, basically I'll tell you the truth. We just did which one we thought would go better.

Henry: Ah, we

Teacher: Henry, did you want to add something?

Henry: Yeah, ah, we did the wrong process. On two and one we divided by six, on seven and eight, and those suppose to be 4.5, not 6.

Teacher: Okay, now wait a minute.

Austin: No, I think well, 'cause at first somebody said something I don't remember who, but then something about six, so I guess I started dividing by six.

Teacher: That's ok., so where did you start dividing by six? Do you remember, Austin?

Austin: Number one.

Teacher: Oh.

Henry: No, it wouldn't be number one.

Austin: Yeah, 'cause the first one, was, wasn't, we did

Caleb: We never divided by eight, did we?

Teacher: Let me ask you this question, let's do this, let's do this. Does this group have your totals written down? Patricia, do you have the totals?

Patricia: Yes.

Teacher: Could you read them? Guys, guys. Could you read them to me?

Alec: Comfort I got fifteen, size twenty, looks thirty-six, brand twenty-eight, style, type

Teacher: Wait, wait, wait. I thought you were going to go in order, you threw me off. I'm at looks thirty-six, and then what happens?

Alec: Um, brand twenty-eight.

Teacher: Okay.

Alec: Type thirty-five, price twenty-two, and quality thirty-one, and style thirty-six.

Teacher: Okay, now. Austin, can you read?

Austin: Yeah.

Caleb: Well, these two are the same because thirty-six divided by six is six.

Teacher: But you said we're dividing by eight.

Caleb: We're dividing by eight?

Teacher: Okay. Oh.

(The groups are recalculating.)

Teacher: Yes?

Student: Are you ready for another group?

Teacher: No, I want to talk about this. I want to talk about why you divided by six and now why you want to divide by eight.

Austin: Because there's eight things on the list.

Henry: There's eight addends.

Caleb: So, there's six groups so we thought that there's six, I thought that there's six groups, so that we'd divide by six, but actually you divide by eight.

Teacher: Okay, this is an important question. So we've got six different reports, but we've got eight things. So when you're trying to find the average you're going to divide by, how are you going to decide what to divide by?

Austin: How many addends and that would be six, so we were doing it right.

Teacher: You were doing it right.

Austin: Yeah, Henry.

Henry: What? You

Teacher: and Ms. McClain, too. You convinced me that you were doing it wrong. Okay, since, this is an important this is really, really, really, important.

They added up, when they did comfort they added up one number, two numbers, three numbers, four numbers, five numbers, six NUMBERS, so you're going to divide by six. Austin, you were absolutely correct, we just did that for eight different things, right? Okay, let me, uh, what time do we get out?

Class: 12:45.

Teacher: 12:45, okay, then all right, then all right, then I'm gonna, we're gonna need to, we're gonna need to, let me just stop and think, Tiffany what you guys did in the back.

Lauren: We did the same thing.

Teacher: Oh, you did the same thing. Can you tell us real quick 'cause I think that's kind of important what you had.

Tiffany: Okay, we took

Teacher: Big voice now, big voice.

Tiffany: Okay, we wrote down each category and we looked at what number it was and say, like, type is number eight, we gave it a one, and, like, size was number seven so we gave it a two, and quality was number six so we gave it a three, we kind of just did it backwards. Then we added it up and whichever one had the greatest amount was like number one and whichever one had the next greatest amount was number two.

Teacher: So, what she's saying is when they got through, their number one, instead of having the least number points, their number one had the most number of points. Does that make sense for what they did? Does that seem reasonable, that in one way the first place could have the least number of points and in another way it could have the most number of points?

Class: Yes.

Teacher: Okay, any questions for that? Did you, was your list similar to this?

Tiffany: Um, our list was like that exactly, and that one we had the same mixed up as they did.

Teacher: Okay, all right, so yours was exactly like this, Okay? All right, nice job. Now, now what I want you to do, what I ask you to do is have a quick little homework problem for you. That you could probably do if you, um, thought about it during your study. I'll pass this out for you. I need you

to think about this for just a second and then we're going to talk about it. Hang on, don't get your books out yet, give me one second. Everybody take a minute to read it and then let's talk about it. Anybody have a question about what I'm asking you to do? Who thinks you could explain what I want you to do in this task? I've got one person. Henry is the only person here that thinks they understand it. Okay, hands are starting to come up. Yes ma'am, Ahren, what do you think, what do you think I'm asking you to do?

Ahren: Um, um, you got to tell

Teacher: Big voice.

Ahren: tell ... what we think should be in a safe neighborhood.

Teacher: In a safe neighborhood. What do I, what do I mean, what's a safe neighborhood to you, Sarah? If I said, do you live in a safe neighborhood, would you say yes or no?

Sarah: Yes.

Teacher: You'd say yes. Why do you think your neighborhood is safe?

Sarah: Well, um, I know like all my neighbors and stuff and they're all really nice and friendly, and like there are no gangs or anything on my street.

Teacher: So you feel safe playing outside? You don't

Sarah: *(nods her head yes)*

Teacher: Okay, so what I'd like for you to do is think about three things that you think happened to make safe neighborhoods. What do you think helped make safe neighborhoods? I don't want you to tell them, I want you to write them down, okay? And then I want you to tell me, for you personally, which was the most important and why you think that was the most important, okay? And you'll bring that to me on Wednesday, right? Okay, have a nice rest of the day.