

MALLORY WILLIAMSON: All right, the first thing I'm going to make you guys do is go ahead and—there's some—the handouts that we're working on, go ahead and take a copy, and put your name and date on it. Also, what you're going to notice is that when we get started you have half-sized chart paper. This is going to be what you're going to be focusing on in a second. All right, so you can spread it out on your desk if you'd like. If you have an empty desk, it's easier for you guys. Okay, today's task is going to be focusing on something that deals with fractions. Okay? So, when you're taking this in mind, the first thing we always want to talk about is what do you notice, what do you observe before I give it to you. So, take a couple seconds by yourself to take a look at the assignment. See what do you notice, what do you observe about what's in front of you.

And that also includes reading the task—the paragraph at the top. Okay, if you go to have a conversation with your group. Ones, you can share first. Just something simple that you'd like to share with your group. What do you notice, what do you observe, before we get started?

STUDENT: Um, some are—that they are—that all of them are in pounds.

STUDENT: I was gonna say the pounds one, but I agree.

STUDENT: Then there's that some have whole numbers in that. That they have one, which is a whole. They have whole numbers in some fractions.

STUDENT: Most of the fractions are eights.

MALLORY WILLIAMSON: Okay, so some of the fractions are listed repeatedly. Anything else you notice about the fractions, Ayla? The fourths and eights? Are those related to each other? Okay, what is something that you noticed or observed, Isabella? So, some of the denominators are fourths and eights. Did anybody else share that commonality? Okay, a couple groups. All right, what else did you notice, Christopher?

STUDENT: I noticed that there's all—there's some of them and mixed numbers.

MALLORY WILLIAMSON: Okay, so we see some mixed numbers. I know that Angel also shared that there's some whole numbers there. Jaadiay, what did you observe with your group?

STUDENT: Well, I said that—I said some of the fractions that are the same, and that I knew that we're going to be like either x-ing something out or whatever we're doing, um, to put them in order.

MALLORY WILLIAMSON: Okay, so we might be placing those fractions in order. There's more than one type of fraction. And then, if we see a certain fraction, we might see it multiple times. Okay? All right, so this morning, you're going to actually create a line plot with the fractions that you see. Okay? So, I'm going to give you some time with your group to collaborate, and the way

I want you to do this is, first, on your own sheet of paper, you're going to create a line plot on how you think it should be created. Okay? So, you're going to take some time and process it, and then after we've had some time to process it, then together, you're going to create one large one. So, it's almost like we put together a final presentation of our line plot, okay? So, right now, by yourself—Or you can even talk to each other, but on your own handout, I want you to go ahead and try to create a line plot with the data that you notice. Okay? All right. Go ahead and get started.

STUDENT: So, one-eighth is the smallest number we have. But we don't have a one-eighth.

STUDENT: We have three-eighths.

STUDENT: We have a one-and-one-eighth.

STUDENT: We have the three-eighths.

STUDENT: Mhmm [affirmative].

MALLORY WILLIAMSON: And how many tick marks are you placing in between the zero and the one? How many tick marks do you have here?

STUDENT: One, two, three, four, five, six, seven.

MALLORY WILLIAMSON: Okay. So, why did you decide to use eight tick marks?

STUDENT: Because that's—Oh, because it's the highest, um, number in the denominators.

MALLORY WILLIAMSON: Okay, so highest number in the denominator. Okay. So, why did you decide to mark your intervals with eighths?

STUDENT: Because, um, all of the numbers over here—up here are multiples of eight.

MALLORY WILLIAMSON: Multiples of eight. Okay. That's a great explanation.

Student: The eight is [inaudible 00:05:04].

MALLORY WILLIAMSON: And eight is also the greatest denominator that's being used. Okay. Why is it important for us to all use the same denominator, because I know I see some fourths, I see some halves. So, why is it important for us to all rename them into eighths?

STUDENT: [inaudible 00:05:19] renamed them so we have one whole—one number that we can just go with. We don't have to keep switching through.

MALLORY WILLIAMSON: Yeah. It's easier, right?

STUDENT: Yeah. It makes it quicker.

MALLORY WILLIAMSON: You don't have to keep switching back and forth. Okay, so now that you've created your line plot, or your number line, excuse me, how are we going to create our line plot with this data?

Student: Um, we are going to, um, put the numbers that are—what we're going to, like, on one-fourth, we're going to put in two-eighths and one-eighth, and then put in—

MALLORY WILLIAMSON: So, why is one-fourth going to be marked on two-eighths?

STUDENT: Because, um, if you—

STUDENT: It's half.

MALLORY WILLIAMSON: How do you know it's half?

STUDENT: Because half of two is one, and half of eight is four.

MALLORY WILLIAMSON: Okay.

STUDENT: Yeah.

MALLORY WILLIAMSON: All right. I'm going to come back and see your line plot. How did you guys decide to divide your number line into two parts?

STUDENT: Um, that one-eighth equals one, and we're going to convert all of them into eighths.

MALLORY WILLIAMSON: So, why didn't we just stop at one if we know that's equivalent to eight-eighths? Why did we go all the way to two?

STUDENT: Because there's one-eighths right here.

MALLORY WILLIAMSON: Okay, so there's a number listed that's greater than one.

STUDENT: Yes.

MALLORY WILLIAMSON: All right. How are you guys doing?

STUDENT: Once we'd be—We started with one-fourth.

MALLORY WILLIAMSON: One-fourth. So, why did you decide to start with one-fourth?

STUDENT: Because it was the lowest fraction.

MALLORY WILLIAMSON: Okay, so what is one-fourth equivalent to? So, I notice that you have one-fourth equals two-eighths. So, two-eighths is our least amount?

STUDENT: Yes.

MALLORY WILLIAMSON: Okay. All right. How can we, um, go from there? So, if we know that we're working with eighths, how can we create a number line from there?

STUDENT: Two-eighths.

STUDENT: We can try to find all the line that also have fours and try to convert them into eighths.

MALLORY WILLIAMSON: Okay. So, renaming your fourths into eighths? Okay. And one thing that I see Elizabeth doing is, if we start off with two-eighths, we listed three-eighths, so is there a four-eighths anywhere? So, I'm going to take a step back, and we're going to go with what Izzy suggested, and we're going to rename our fractions into eighths, okay, and then when we're creating a number line, we also ended with—Elizabeth ended with one-and-one-half, so Elizabeth, why did you decide to end your number line with one-and-one-half?

STUDENT: [inaudible 00:07:52].

MALLORY WILLIAMSON: The largest number. Okay. So, I'm going to come back, give you guys some time to rename your fractions into eighths since you already have told me that four-eighths—You know, the two—one-fourth is equivalent to two-eighths, and then that can maybe help you create your number line. Okay? All right.

MALLORY WILLIAMSON: All right, so now that you guys have your number line, what are you guys going to go from, go from here?

STUDENT: We're going to convert all of them into eighths.

MALLORY WILLIAMSON: Okay. So, can you show me how you're going to do the first one?

STUDENT: One-fourth to one-eighth equals—

MALLORY WILLIAMSON: And you guys can jump in anytime. How do you think we convert one-fourth to eighths?

STUDENT: If you have a denominator of four, and you multiply four by two to get eight.

MALLORY WILLIAMSON: Okay.

STUDENT: Which means we would multiply both the numerator and the denominator by two to get two-eighths.

MALLORY WILLIAMSON: Okay, so one-fourth is equivalent to two-eighths.

STUDENT: Two-eighths.

STUDENT: Okay, so...

MALLORY WILLIAMSON: All right, show me how you renamed three-fourths.

STUDENT: Times two is eight. Six.

MALLORY WILLIAMSON: To keep your fractions organized, what I would suggest is recording your new equivalent fraction right beside it, so that way it can help you organize your data. Okay. All right. I'll come back.