Seating Arrangement ${ }^{1}$

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| :---: | :---: | :---: | :---: | :---: |
| Pharoah |  |
| Nick |  |
| Karina |  |
| Alyssa |  |
| Autumn |  |
| Honoré |  |
| Shawn |  |
| Noah |  |
| Leyla |  |

## Problem \#1 on the board:



What fraction of the big rectangle is the blue region? What fraction of the big rectangle is the green region?

[^0]| Teacher: | I'd like to see some hands from people I haven't seen speaking in whole group yet today. Who thinks that they could explain their thinking for question one? Still waiting to see a few more hands. Lots of people have work done in their notebooks. Okay, Mamadou. What do you think about question one? |
| :---: | :---: |
| Mamadou: | Question one, I say it's one-half. |
| Teacher: | Okay. Can you explain how you came up with one-half? |
| Mamadou: | Because they both equal. They both equal, and onehalf of it is shaded in and the other half is not. So that is... |
| Teacher: | Okay. Can you come up to the board and point and show us what you're looking at? Just- there's a diagram right there. Can you come up and show? Did everyone hear what Mamadou said? You should be thinking already about his reason. Who can repeat what Mamadou said? Okay. Well if you're listening carefully, you should always be able to tell what someone just said. Dovan, what did he say? |
| Dovan: | He said he's looking at the squ- rectangle, and he's saying it's one-half of the rectangle, not just- He's justHe's not looking at the whole, he's just looking at the one part- |
| Teacher: | Wait, wait, wait, let him talk. Don't go on to explain it yet. Okay. |
| Dovan: | Oh. |
| Teacher: | Mamadou, go ahead. Do you want to use the big one? |
| Mamadou: | Half of the- |
| Teacher: | Just a second. Everyone should be looking up at where Mamadou is pointing, otherwise you won't understand his explanation. Shawn? This way. Look up there. Okay? |
| Mamadou: | They both equal, and half of it is shaded in. So that makes it one- one-half. |


| Teacher: | Okay. So let's look at our working ideas about fractions that we were doing earlier today. Can someone say what- Or maybe you should say what are you calling the whole? When you're looking at the whole what are you looking at? | 68 69 70 71 72 | Students: Teacher: | Yes. <br> Yes. Now the question asks you something a little bit different. So who can tell everybody what question we're trying to answer? What Mamadou did is right, but he used something different to be the whole. Good job, |
| :---: | :---: | :---: | :---: | :---: |
| Mamadou: | The whole. The whole square. | 73 |  | Mamadou. Now pay attention to what the other |
| Teacher: | Can you put your finger around the part you're calling the whole? | 74 75 76 |  | question was that we're answering too, okay? You can go sit down. Thank you. Alright. So look at question one. Would somebody read it and say what are we |
| Mamadou: | The whole. | 77 |  | supposed to interpret the whole to be from that |
| Teacher: | Okay. So, do you see where he just pointed? | 78 79 |  | question? How about Ariel? Can you read question one? |
| Students: | Yes. | 80 | Ariel: | What fraction of the big rectangle is shaded blue? |
| Teacher: | Okay. And where are the equal parts? Can you show us the equal parts? | 81 82 | Teacher: | Okay. And what do you think is meant by the big rectangle? |
| Mamadou: | These two. | 83 | Ariel: | The whole rectangle? |
| Teacher: | Okay. And how many parts are shaded? | 84 | Teacher: | What whole rectangle? You wanna come up and show |
| Mamadou: | One. | 85 |  | us? |
| Teacher: | Okay. Raise your hand if you understand what | 86 | Ariel: | Yeah. |
|  | Mamadou did. Who knows what Mamadou did to get his answer of one-half? I don't want to hear how you | 87 | Teacher: | Mamadou, are you watching? |
|  | agree or disagree. I just want you to tell me what did he do. Kalvin? | 88 89 | Ariel: <br> Teacher: | All this. <br> Okay. The whole big rectangle. Okay. So now |
| Kalvin: | He just made the part where the blue part is shaded. He just used that rectangle as a whole. | 90 |  | someone to explain, if you look at the whole big rectangle as the whole- Okay, now we want to talk |
| Teacher: | Okay. Let's draw it on here so we can keep our original picture. You used this to be the whole, right? | 92 93 94 |  | about all of this. The question asks, if you use the whole big rectangle to be the whole, how much is shaded blue? Mamadou, do you see the difference |
| Mamadou: | Yes. | 95 |  | between the question you answered and this question? |
| Teacher: | Can everyone see this? | 96 |  | Okay. What's the difference? |
| Students: | Yes. | 97 | Mamadou: | You gotta try to figure out, out of the whole square- |
| Teacher: | And what did he do then, Kalvin? | 98 | Teacher: | Out of the whole rectangle. And you used what? |
| Kalvin: | And then he had saw that one part was shaded and the other part wasn't so he... | 99 100 | Mamadou: <br> Teacher: | And I did half of the rectangle. <br> You did a smaller part of the rectangle. Okay? |
| Teacher: | And are these two equal parts? So if Mamadou calls this the whole, is he right that that's one-half? |  |  |  |

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[^0]:    ${ }^{1}$ Some names used are pseudonyms and, to the extent possible, match the actua inguistic and ethnic backgrounds represented by the names. They also accurately reflect the individual's gender.

