1.0.230	T/R 1:	How about this one. Let's look at brown and let's look at red. If I call brown one, what number name would I give to red? [pauses then repeats question] If I call brown one, what number name would I give to red? [Waits for students to solve it and raise their hands] If I call brown red, what number name would I, brown one, what number name would I give to red? Danielle. I can't, Joanna, could you, Danielle.
1.0.231	Danielle:	Fourths.
1.0.232	T/R 1:	Nice and loud.
1.0.233	Danielle:	Fourths.
1.0.234	T/R 1:	One fourth. How many of you think one fourth? And what would you do to convince me?
1.0.235	Danielle:	Well, I put the four blocks up to the brown.
1.0.236	T/R 1:	Okay. So you would put four like this, and you would give the red the number name one fourth. Is there anybody who disagrees with that? Let me change the problem. Now I want to call the red rod one, what number name would I give to the brown rod? Now I'm gonna call the red rod one, what number name would I give to the brown rod? Jacquelyn.
1.0.237	Jacquelyn:	Four.
1.0.238	T/R 1:	Why four? You'd call it four. Why would you call it four?
1.0.239	Jacquelyn:	Cause, this is one [raising the brown rod] and if you line them all up, like that, and you add them all up it would be four wholes.
1.0.240	T/R 1:	Okay, how many of you agree with that? Now I'm wondering, some of you looked at me sort of, ah-ha, I see what she's doing, right? Are we changing the number names, for the rods? Yeah, we're

changing the number names for the rods. So we have to always say to ourselves, what's one? Right? I need to know what one is before I can tell you the number names for the others, isn't that true? Now I'm going to have you make up a problem for me. I want to call the white rod one half. What would I have to call one, if I make the white rod one half? What would I have to call one in order to name the white rod one half? Talk to your partner to be sure you agree, and if you and your partner agree, in this case, we have two partners with Jacquelyn, Kelly, and Michael, when you all agree, raise your hand at your table. What would I have to call one, if I want to call the white rod one half? Okay, Laura.

1.0.241	Laura:	The red.
1.0.242	T/R 1:	Laura says I'm going to call the red rod one. How many of you agree? And what would you do to convince me? What would you do, Graham, to convince me?
1.0.243	Graham	You would take a white rod and stick it right on the end of a red one.
1.0.244	T/R 1:	I think you have the idea.