G3   Could you use these blocks to represent this problem? If you can say this rule in this way, this way [pointing to the rule written in the paper] and this way [pointing to the rods].

James   [arranging two rods side-by-side] These are two craft piece. Don't know how to multiply this by three, meaning add two more [arranges two more rods] and two more [arranges two more rods] and two more and you get the same thing

G3   And now where are the three and two … this rule [pointing to the paper that is with James]

James   That's it. That is what I am showing you. [pointing to the paper]

G3   Could you explain again? I didn't really follow…

James   These are three craft pieces, so you have to multiply by two, I mean three to get how many, how much money it would cost which would be three times three is nine, so it is nine dollars and you will have to add two more to it [adds two rods at the top] for the entry fee which is two dollars so you have to pay eleven dollars.

G3   OK. [pointing to the ladder that James had constructed] and what would be all these blocks put together?

James   [pointing to the rods] These all blocks together that is eight.

G3   Eight. And that's how much you spend?

James   Yes.

G3   Yeah.

G3   [pointing to the ladder that James had constructed] And how many crafts did you buy in this when you have spent eight, eight dollars?

James   That is eight craft pieces, since there are eight blocks means there are eight craft pieces meaning each one of them cost three dollars so three times eight is twenty-four but then you have to add two dollars because there is entry fee and there is twenty six dollars.

G3   OK, but OK. You mean the eight dollars is how much money did you spent.

James   [pointing to something written in the paper] No, the eight dollars is for this step, it is for the eight blocks, it is not eight dollars [pointing to the ladder] and in this is eight craft pieces meaning each of them cost three dollars then you have to add plus two more [removes two rods from the plastic bag] you wouldn't call them craft pieces, it is just two more for the entry fee for the two dollars and then it will equal twenty six dollars.
[There is an announcement over the PA system.]

G3   [picking two rods] So you said that these two are entrance fee.

James   I don't count … We don't count that as craft pieces. We count those as dollars.

G3   [picking one rod] OK. So this is one dollar [picking another rod] and this is one dollar.

James   Yes.

G3   OK. Now I see, now I see. OK. So two dollars was the entrance fee [pointing to the two rods.

James   Yeah.

G3   So what if you buy one craft piece?

James   [taking one rod] You take one of these as one craft piece, so that is three dollars plus two so you only have to spend five dollars that day.

G3   [pointing to the rods] But there is only three of these.

James   [picking up the first rod] This is one craft piece. [pointing to the other two rods] Those are the money, which is the entrance fee. [taking the first rod] This is the one craft piece you buy, so this is one craft piece which equals three dollars and you already paid two dollars as entrance fee so you paid five dollars for the whole thing.

G3   I see, I see. I got confused because they look similar. [pointing to the first rod and the other two rods] If these are one dollar [pointing to one of the other two rods] and this is three dollars [pointing to the first rod] OK.

G3   But could you use these so that this is also a dollar [pointing to the first rod] so that every block is one dollar

James   [shaking his head] Every block cannot be one dollar.

G3   Why not?

James   Because then it will be eight dollars and it will be all wrong because if each block was a dollar then how would you find the craft piece … craft pieces. You wouldn't. [shrugs]

G3   So if you buy one craft piece you would need how many dollars?

James   Three.

G3   Three dollars.

G3   And can you count the three dollars using these blocks, if one block is as you say one dollar?

James   I didn't say all blocks, I just said those two. I said these [takes the first block and other blocks] are craft pieces.

James   [starts marking the eight blocks with a pen] So let's mark all these with black dot and assume these are craft pieces and don't mark those meaning they are dollars. So these are [counts the eight rods] eight craft pieces meaning

	times three is twenty four dollars you would need to pay for all of those and these are two dollars which you have to add on because of how many it costs to get in, so then that [the dollar rods] would be added to that [the craft piece rods] that would be twenty six dollars.
G3	I just wonder if you cannot put these marks on these [turning upside down the marked craft piece rods] so like all blocks are similar. You put the little marks so … [inaudible]
	[There is an announcement over the PA system.]
G3	If you cannot make these marks, can you still do the same problem?
James	No.
G3	Because you need blocks for three dollars.
James	For craft pieces.
G3	For craft pieces.
G3	But you cannot use these all …? [pointing to the rods]
James	No, no.
G3	Because these are only one dollar?
James	Them just dollars.
G3	[pointing the two rods representing the two dollars] So the entrance fee two dollars, but yeah.
James	Yeah.
G3	What about the craft pieces?
James	[pointing to the rods representing the eight craft pieces] Each of these equals three dollars.
G3	[pointing to a rod representing a craft piece] And if this is one dollar?
James	[thinking for some seconds] Now, now, I see it in a way [inaudible] because each of these craft piece is supposed to be equal to three dollars, so it means this three dollars, this three dollars, this three dollars. But those over there [pointing to the dollar rods] are two dollars equals to each of them is just one dollar.
G3	Could you say that again? I am just… I am not so fast.
James	Say it again?
G3	Yeah. I didn't get it. You are so fast.
James	Meaning these are craft pieces which each equals three dollars. So it means these are really money and equal to three dollars.
G3	Each of this is only one dollar.
G2	No, they are three dollars because they are craft pieces. These are however one dollar for each of them to pay for the entrance fee which is two dollars.

G3   So you take two of these [pointing to the dollar rods] to get two dollars.

James   Yeah.

James   [pointing to the craft pieces rods] And these which are craft pieces, sorry [drops a rod on the floor] are craft pieces, they are equal three dollars. So since there are eight it would equal twenty six dollars. Twenty four dollars. And then plus two dollars you get twenty six dollars.

G3   [pointing to the dollar rods] Here you take two blocks to get two dollars. Could you do the same to these to get three dollars? [pointing to the rods representing the craft pieces]

James   No.

G3   [taking one craft piece] If this is only one dollar?

James   No, they are not one dollar, they are craft pieces which is three dollars.