Description: Clip 2 of 8: Candy hearts interview with Jeff **Content: Harding Elementary School** **Research: Amy Martino** **Tape: Non-routine counting problems** **Date: 1990-02-26**	**Authors: Madeline Yedman** **Verified: Dasom Lee** **Date: 2013-11-25** **Page: 1 of 6**

Line	Time	Speaker	Transcript
1			The first problem that the children worked on was called the candy hearts problem. This is a problem about a jar of candy hearts. Each layer of candy in the jar has the same number of pieces. Can you figure out how many candy hearts are in the jar without opening it? First, discuss the problem with the people in your group. Next, explain how you solved the problem on this page. You may draw pictures to help you explain your answer. This is what the candy jar looked like to the youngsters (image of the candy jar is displayed). You will note that there are five layers of the candy and each layer has twelve pieces (displays the bottom of the candy jar). Once the children had achieved a solution to the problem on the yellow sheet they were given a challenge problem on a pink sheet of paper and the problem says "Our jar has blank pieces of candy. All the jars have the same number of candy hearts. Imagine that we collect all the jars of candy and decide to share all the candy hearts. Each person in the room has to get the same number of candy hearts. Figure out how many candy hearts each person would get without opening the jar. Explain how you solved the problem on this page. You may draw pictures to help you explain your answer."
2	1:39	**Jeff**	Okay,
3		**Interviewer**	I just wanted to ask you some questions about what you did this week. First off did you like doing this problem?
4		**Jeff**	Uhhhum
5		**Interviewer**	Why'd you like it?
6		**Jeff**	It was neat working with other people to figure out a

			problem
7		**Interviewer**	That's great, okay. Do you remember the two problems that I gave you?
8		**Jeff**	Nods head yes
9		**Interviewer**	The yellow problem can you explain to me again how you solved the yellow problem?
10	2:04	**Jeff**	We um, we counted the bottom first and there was twelve so I kept plussing that to how many layers there was.
11		**Interviewer**	Okay, how many layers were there do you remember?
12		**Jeff**	Five layers
13		**Interviewer**	Five, okay. So you kept plussing, what were you plussing? Which number?
14		**Jeff**	Twelve
15		**Interviewer**	Twelve, okay. Um let me ask you, how many of the- how many of the candies were there all together? Do you remember?
16		**Jeff**	Sixty
17		**Interviewer**	Sixty, okay. We have to wait a minute till everybody's out of here to finish this. Okay, alright lets start again. You just finished telling me that there are 60 candies in here, okay. And you're absolutely sure of that?
18		**Jeff**	(Nods head yes)
19		**Interviewer**	Would you bet money on that? Assuming I'm telling you the truth that there's the same number in each layer.
20		**Jeff**	Yeah

21		**Interviewer**	Okay. Alright, now let me ask you a question, thre seems to be some debate. I was looking at the tape of you guys and there seemed to be some debate between you and Brian and Stephanie. Now that's the way that you did the problem, um can you tell me did they solve it the same way or did they solve it differently?
22		**Jeff**	Well me and Brian were trying, we solved it the same way but Stephanie she tried to, she tried to..every time we got an answer she would try to find out another way for it.
23		**Inter**	Oh I see. Why do you think she was doing that?
24		**Jeff**	I don't know.
25		**Interviewer**	Okay, do you know what way she was trying to do it?
26		**Jeff**	(shakes head no)
27		**Interviewer**	Ah now let's see. This one was tougher, the pink page. Can you tell me what it was that you're trying to find out?
28		**Jeff**	How the number of candies everybody would get.
29		**Interviewer**	The number of candies that each person would get, okay. And how did you go about doing that?
30		**Jeff**	Well, we figured out our own group first.Once we got that there were sixty we said there'd be twenty for everybody in our group.
31		**Interviewer**	Okay
32		**Jeff**	So we did that for everybody in the class.
33		**Interviewer**	Okay so you did that for everybody in the class. I remember though when I was and Brian was just saying this, I remember that you guys were a little bit concerned about including Steven and Will in because there were two

			of them. So what did you guys do to resolve that.
34		**Jeff**	I figured out that we should just give twenty to Ms. Hackey and we solved it like that.
35		**Interviewer**	So in other words Ms. Hackey you made her a part of one of the groups. And that way you had the same number of people in each group?
36		**Jeff**	(Nods head yes)
37	4:46	**Interviewer**	Okay, that's a very cleaver way to do it. And how many did each person get if you included Ms. Hackey
38		**Jeff**	Twenty.
39		**Interviewer**	Twenty, okay. Now let's see. I'm going to ask you another question. What if I decided to add another layer of candy to this jar? Okay, and it had the same number of pieces as all the other layers how many pieces do you think...
40		**Jeff**	Seventy-two
41		**Interviewer**	Wow that was fast. How'd you figure it out?
42		**Jeff**	Because, I just did the twelve plus sixty.
43		**Interviewer**	That was quick. Why did you say twelve?
44		**Jeff**	Because when we started out there was twelve on the bottom.
45		**Interviewer**	Okay,
46		**Jeff**	And it was the same in each layer
47		**Interviewer**	Okay, that was very good! Okay what if I gave you a totally different jar? Forget about this one, and the jar has four layers of candy. Okay try and picture this jar with four layers of candy and each layer has six candies in it.

			How many candies are there in the jar?
48		**Jeff**	Twenty four.
49		**Interviewer**	Twenty four, okay. And how do you know that?
50		**Jeff**	Because I put two of the layers together and that was six plus six and I get twelve. So I put twelve plus twelve.
51		**Interviewer**	You had..say that again, go ahead.
52		**Jeff**	Well we had six I figured out that tehre was six in one so then I did six plus six is twelve and then I used another set so I used that up and I got twenty four.
53		**Interviewer**	Very clever Jeff. That's pretty neat. Okay, did you like working on this, what you did? (Jeff nod's head yes) okay, now let me ask you, you guys came up with a final answer of twenty two when you came up to the front here, remember that? Why'd you decide on twenty two?
54		**Jeff**	Because of including Ms. Hackey we could use twenty two and we would have enough to give everybody the extra two.
55		**Interviewer**	Oh okay.
56		**Interviewer**	How many extras were there when you didn't include Ms. Hackey?
57		**Jeff**	There were twenty.
58		**Interviewer**	There were twenty extra and when you split that up it was two extra for everybody?
59		**Jeff**	Yeah.
60		**Interviewer**	Okay, alright. Thank you Jeff. You have been so very helpful.

61		**Interviewer**	This was Jeffrey's solution to the first problem (camera shows the solution) and he writes We started with twelve because we counted the bottom and then we took all of the two's from the five layers and that equals to ten and there were five tens left we got sixty.
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