The meeting

Annotation

Rachel uses an equal additions strategy to solve this problem. She looks for and finds that, with these two numbers, there is no obvious relationship that she can build upon. In her initial strategy she is carrying out two subtraction problems simultaneously. Rachel then quickly recognises an alternative and more efficient equal additions subtraction method.

Problem: The meeting

The teacher shows this problem to the student and reads it with her as required:

231 people said they would attend the meeting. 78 didn't show up. How many were at the meeting?

Student response

Rachel:	I know it would be around 150 because I did an estimate. 231 is about 230, and 78 is about 80, so 231 – 78 is going to be about the same as 230 – 80. I did that by just looking at the tens and went 23 – 8, which is 15. So my estimate is about 150. It's actually 153.
Teacher:	Tell me how you did that.
Rachel:	I took away 31 from 231 and from 78 as well. That left 200 – 47. 200 – 50 would be 150, so it's 3 more. It's 153.
Teacher:	What do you know that helped you?
Rachel:	I know this isn't one of those neat and tidy problems. I've got to do it in bits of some kind.
Teacher:	Tell me why you did it that way:
Rachel:	Mmmm… actually it would've been easier if I'd added 22 to 78, and 22 to 231.That'd just be 253 - 100, which is 153.
Teacher:	How would you record that?
Rachel:	Yeah well it's kind of complicated to show all the bits so I'd probably just show the last one like this.