Sports teams

Annotation

Erina understands the context and uses her knowledge of known multiplication facts to solve this ‘change unknown’ multiplication problem. She explains her understanding of multiples of 10 to justify her solution.

Problem: Sports teams

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

There are 40 relay teams competing in the interschool sports. Altogether there are 120 competitors. How many are in each team?

Student response

Erina:	There’d be three in each team.
Teacher:	Tell me how you did that.
Erina:	Well I thought, what I would times the 40 by to get 120? When I looked at the numbers while you were reading, the 4 and the 12 jumped out at me kind of like the zeros weren’t there. I know 4 x 3 = 12, so I figured that 40 x 3 would be 120.
Teacher:	What do you know that helped you?
Erina:	Well I just know 4 x 3 and I know how to times by 10. The 40 is really just 4 x 10 and the 120 would be 12 x 10. It’s kind of neat really to use your tables like that. I know that I can go 40 times 3 is 120.
Teacher:	Tell me how you would record that.
Erina:	Well I’d write 40 x 3 = 120 because that shows how many are in each relay team. But I could write all the other ‘timesing’ I did too if you wanted me to.