http://topdrawer.aamt.edu.au/Mental-computation/Good-teaching/Multiplication-and-division/Building-connections/Splitting-arrays

## Transcript of video Splitting Arrays

Anne: Vince, I noticed you made an array of six by seven. Can you tell me about it?
Vince: Yes. There are six rows, these are the rows and there are seven tiles: three, three, six and one more seven in each row.

Anne: Mm-hm. Do you know how much that is altogether?
Vince: I have to work it out, I think. It's 6 times 7 and that's 6 times 5 , so 6 times 5 is 30 , and there's 6 times 2 over here so that's 12 , yeah, got it now. That's 42 .

Anne: Okay. Now I noticed you used the straw to help you. So you've actually split the array six times seven, into six times five and six times two.

Vince: Mm-hm.
Anne: Is there another way you can split the array to help you work it out?
Vince: I think I know my three times table. I am going to try this way. Yeah, I do, I know my three times table, so that's the other way around, so that's 7 times 3 , so 7 times 3 and $I$ know that is 21 .

Anne: Mm-hm.
Vince: And another 7 times 3 and that's 21 here, that's right, because it comes to 42 .
Anne: Okay. So I could challenge you to see if you can find lots of other ways to split the array to see if you can work it out and then decide which one is the easiest. So that's a challenge I'll leave you with.

Vince: Thank you.

