



<http://topdrawer.aamt.edu.au/Mental-computation/Big-ideas/Generalising-patterns-and-relationships/Properties-of-operations-Commutative-and-associative>

## Transcript of video Masked Collections

Vince: How many counters do you see, Rose?

*(Vince lifting a sheet of paper to show a set of red counters)*

Rose: Six.

Vince: Good. How did you know they were six?

Rose: There were three on each side.

Vince: Okay, good. How many counters do you see?

*(Vince lifting another sheet of paper to show a set of green counters)*

Rose: Nineteen.

Vince: How do you know it's nineteen?

Rose: Because there was a full card of ten and then there was one missing on this, so there was twenty spaces and one missing.

*(Rose explaining the reason behind her answer by pointing to the counters)*

Vince: OK. So I would like you to do this. I would like you to work out six plus nineteen, and tell me how you worked it out.

*(Vince writing  $6 + 19$  on sheet of paper with a marker)*

Rose: I would take one from the six to make twenty here, so I'd have twenty plus five is twenty-five.

*(Rose giving the solution to the question pointing towards figures written on the sheet of paper)*

Vince: Okay. So you just show me what you did.

*(Vince taking off the sheets of paper covering both sets of counters)*

Rose: So I take one from here so now I've got twenty and then I've got five there so it's twenty-five altogether.

*(Rose taking one red counter and placing it to the other side with green counters)*

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Vince: So you're really doing this, aren't you?.

*(Vince writing  $19 + 6$  on the sheet of paper)*

Rose: Yes.

Vince: Starting with the nineteen.

Rose: The bigger number.

Vince: And what do you notice?

Rose: They're both equal to twenty-five.

Vince: Okay. And anything else that you notice? Do you notice something?

*(Vince does a turning motion with his hand)*

Rose: Oh, that they've been turned around the other way.

Vince: Well done.