

Three students were asked to draw this matchstick pattern:



This is how Phoebe drew it:



Can you describe what Phoebe did?

How many 'downs' and how many inverted C's are there?
How many matchsticks altogether?

This is how Alice drew it:



Can you describe what Alice did?

How many 'alongs' and how many 'downs' are there?
How many matchsticks altogether?

This is how Luke drew it:



Can you describe what Luke did?

How many squares and how many inverted C's are there?
How many matchsticks altogether?

Now picture what Phoebe, Alice and Luke would do if there had been 25 squares.

How many of each shape would they draw?
How many matchsticks altogether?

If there had been 100 squares? How many matchsticks altogether?
A million and one squares? How many matchsticks?