



## 3 Blocks Towers

Take three different colour blocks, maybe red, yellow and blue.  
Make a tower using one of each colour.  
Here's one with red on top, blue in the middle and yellow on the bottom.



Now make another tower with a different colour on top.

**How many different towers can you make?**  
**How will you know that you have found them all?**

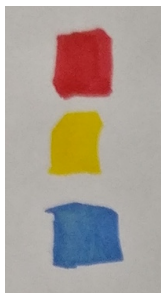
Below you can see how two children started this task.

*Jemima says:*

I used multilink cubes to make the towers. First of all, I looked for towers that were red at the top.

*Elias says:*

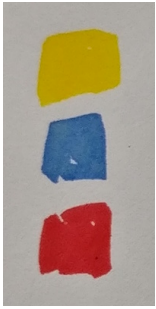
I drew coloured squares for the blocks. I put them in any old order to start with:



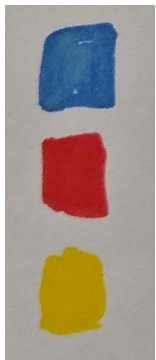
Then I moved red to the bottom and moved yellow and blue up to make a new tower:



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I did the same again, moving yellow to the bottom:



I did this again, but realised that would give the first tower. So I went back to my first tower and kept the bottom cube the same, but swapped the top and middle.

**Did you start the problem in the same way as either of these children?**

**What do you think about each method?**