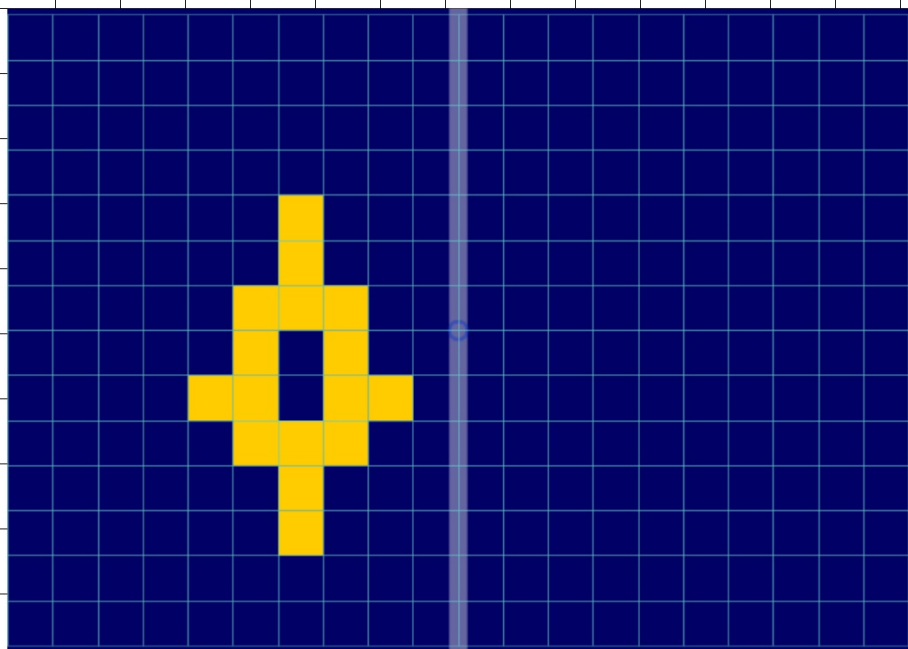


To use our knowledge of symmetry to  
create puzzles.

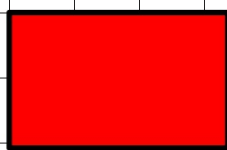
To use our knowledge of symmetry to create puzzles



To use our knowledge of symmetry to create puzzles

**Step 1:** Count in ten squares from the left of your page and draw a vertical (going down) line of symmetry 10 squares long.

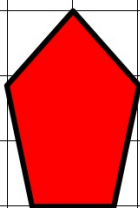
**Step 2:** On the left side you will create a pattern by colouring blocks or drawing half of a shape.



**Step 3:** Once you have made a two patterns you can swap with a partner and complete the right side.

To use our knowledge of symmetry to create puzzles

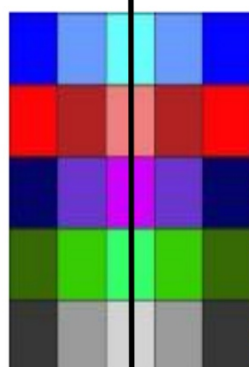
Ext: Now try using horizontal and diagonal lines of symmetry!



## To use our knowledge of symmetry to create a symmetrical pattern

Charlie has been designing tablecloths for each weekday. He likes to use **as many colours as he possibly can** but insists that his tablecloths have some symmetry.

The 5 by 5 tablecloths below each satisfy a different symmetry rule.



Monday's 5 by 5 tablecloth has just 1 line of symmetry.

Use [this interactivity](#) to design tablecloths of other sizes with just 1 line of symmetry.

**Can you find a way of working out how many colours would be needed for an  $n$  by  $n$  tablecloth (where  $n$  is odd)?**

To use our knowledge of symmetry to create a symmetrical pattern