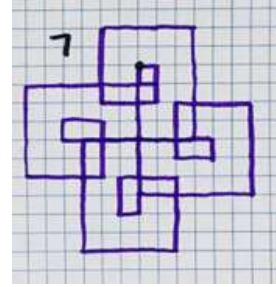


# Mr Hull's Art Challenge



## Spirolaterals!

Today, we are going to be making a range of spirolaterals, but what are they?

**Spirolaterals** are geometrical figures formed by the repetition of a simple rule. The base pattern is formed by drawing line segments of increasing length (in integer units) up to a particular size, turning a fixed angle after each segment (clockwise or anti-clockwise) – simple, right?

**Let's have a look at what that means.**

First, you need to choose a times table. I would recommend starting with a small times table to begin with and then experimenting with others after. My example will use the two times table.

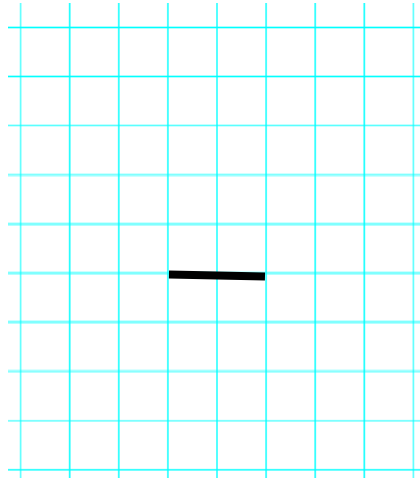
**2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24...**

We can only use the single digit numbers. When we get to the two digit numbers, we need to add the digits together. E.g. 10 is  $1 + 0 = 1$

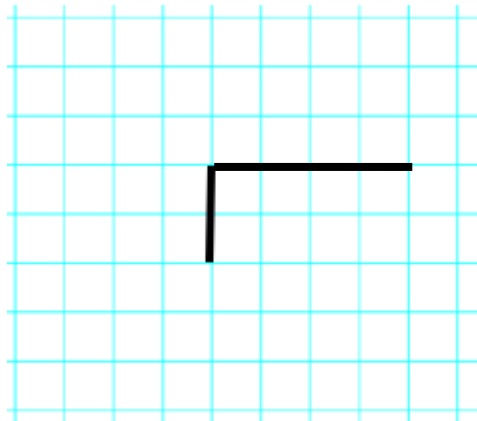
This will end up with a pattern that repeats itself.

**Once you have this you can start your spirolaterals.**

Take the first digit in your sequence (in my case 2) and draw a line that goes 2 squares along. You may want to start relatively near the middle of your page.

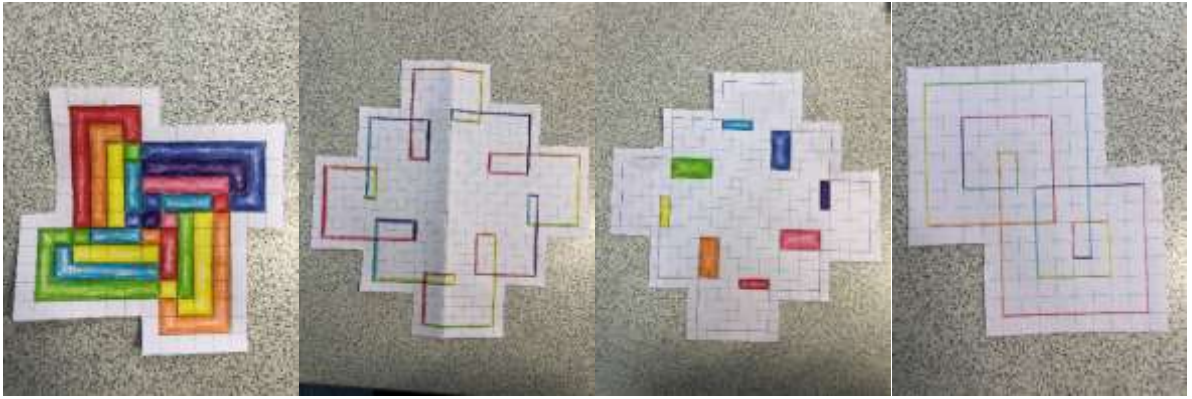


Then turn your page 90 degrees clockwise. Draw your next line starting where the last one finished. This time it needs to be as long as the next number in your sequence (in my case, 4).



Keep following this pattern. Turn your page 90 degrees clockwise and draw the line the length of your next number and continue to do so until you end up back at the place you started.

Now you can colour in your design however you like!



Here is the link to a useful YouTube video that may help too:

<https://www.youtube.com/watch?v=ByGisUAvd8k&feature=youtu.be>