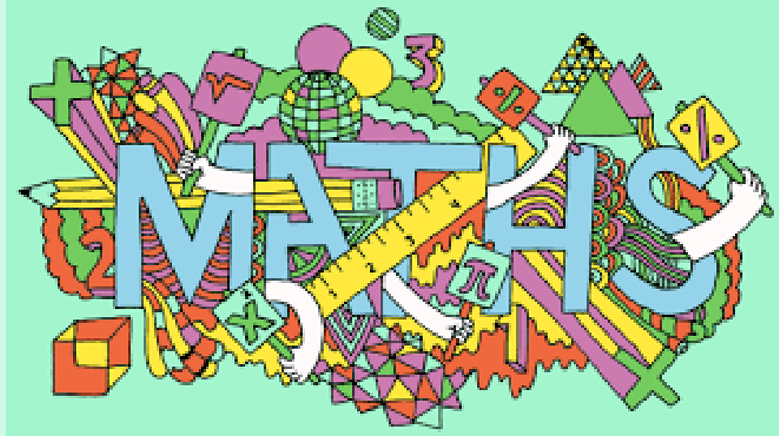


The Maths Art edition

During the first lockdown, Mrs Rymill discovered a love of Mathematical Art—here are some of her favourite activities that she would like to share with you. Please let her see your MathsArt creations by emailing them to erymill@cambournevc.org

Mandalas

Based around circles, Mandalas are highly decorative and wonderfully mindful to create.

Here is a link with some advice on how to start drawing mandalas— you could use paper, or a computer or even paint one on a stone!

Celtic Knots

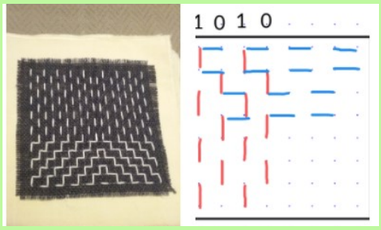
The Challenge: Create a Celtic knot, and do some wondering about why you got the number of links that you did. Can you predict how many links you'll get?

Here is a link to some instructions on how to draw these intricate diagrams

https://arbitrarilyclose.com/2020/04/02/mathartchallenge-day-18-celtic-knots/

Hitomezashi stitching

The Challenge: Using grid paper, assign each row/column a 0 or a 1. Then "stitch" both ways. You could assign the 0s and 1s as you prefer, or with a coin, or you could code something in binary!



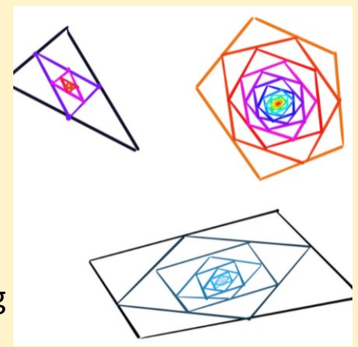
Here is one of Mrs Rymill's creations to inspire you! (See above link for more details)

Polygon Midpoints

The Challenge: Draw a polygon. Then mark the midpoint of each side. Connect the midpoints of each side to make a new polygon.

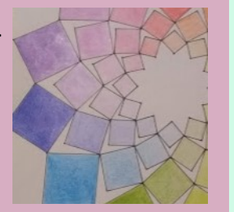
Repeat.

(Don't sleep on the quadrilaterals here. They do something rather surprising and beauti-



Islamic Geometric Art

If you are a bit handy with a pair of compasses and a sharp pencil you could attempt some of these intricate designs... They take time but are seriously impressive...

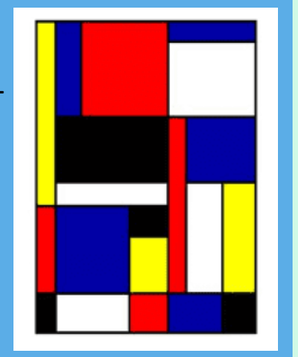


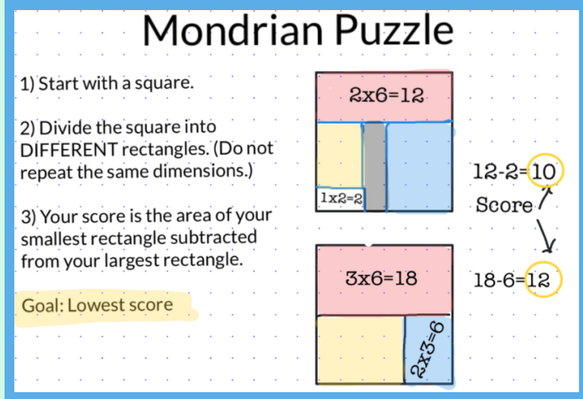
This is based on the Lotfallah Mosque Dome and tutorials for other designs can be found here .

The second and third patterns were drawn by Mrs Rymill using the help of a lady called Samira Mian who has amazing video tutorials and challenges on her website here

Artist: Piet Mondrian

Piet Mondrian is a Dutch artist best known for his abstract paintings. Mondrian did not use a ruler to measure out his lines! He thought carefully about where to place the lines, like those that you see in this painting.





Here is a puzzle based on this painting:

https://mathpickle.com/project/mondrian-art-puzzles/