

Fun stuff!

Make it

Maths art!

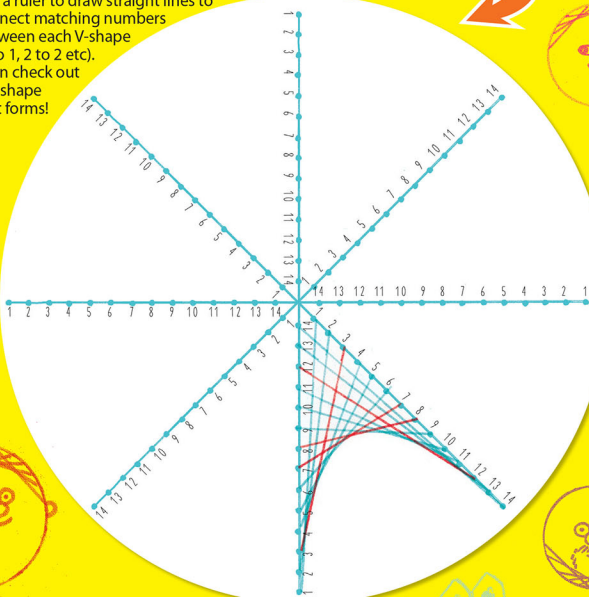
Maths and art might seem worlds apart, but they're actually both full of beautiful patterns. Have a go at these smart art activities and puzzles...

CRAZY CURVES

Did you know that you can make curves using a ruler?! This type of curve is called a **parabolic curve**. Use the grid below to create a cool parabolic curve design.

WHAT TO DO

Use a ruler to draw straight lines to connect matching numbers between each V-shape (1 to 1, 2 to 2 etc). Then check out the shape that forms!



TINY TRIANGLES

Create **tiny triangle 'tile' patterns** using square grid paper and a pen.

WHAT TO DO

1. Make a **right-angled triangle** by drawing a **diagonal line** through one of these tiny **squares** and colouring **one side** in...



2. Now you have two right-angled triangles – one filled in, one white. Try it!

3. Draw **triangle tiles** next to each other to make a larger pattern...



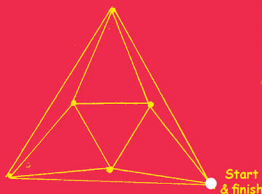
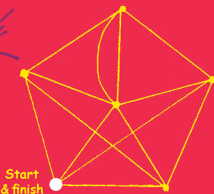
4. Keep the pattern going!



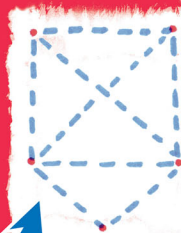
Make your own triangle tile patterns here!

EULER'S CHALLENGE

Can you trace over these drawings, **starting and ending** at the same dot, **without lifting your pencil**? You can only go over each line once!



They might be tricky, but they are do-able. Now try this one...



It's **impossible**, right? That's because this trick only works if every point in the drawing has an **even number** of lines coming out of it. A mathematician called **Leonhard Euler** figured this out in the 18th century.

PUZZLE BOOKS!

These awesome activities are taken from

This is Not a Maths Book by **Anna Weltman**. Learn how to create a dazzling array of amazing mathematical patterns and shapes, from perfect circles to 'impossible' triangles.

