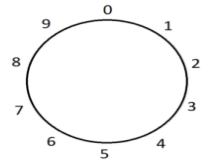
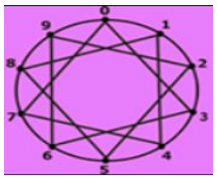
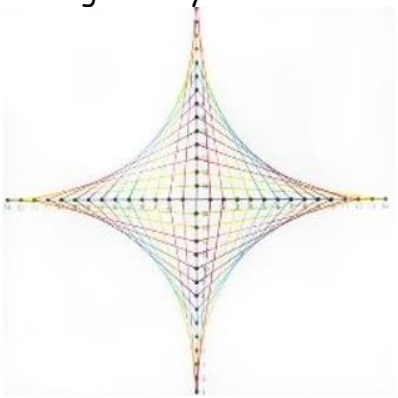
Maths Homework Grid (KS2)

Times Tables Spend at least 15 minutes a day practising your times tables https://ttrockstars.com/ https://www.topmarks.co.uk/maths-games/hit-the-button https://www.timestables.co.uk/	**Maths Games** Choose a maths game to play each day. Have a go at inventing your own maths game. https://matr.org/blog/fun-maths-games-activities-for-kids/ Link to maths games videos: https://www.youtube.com/watch?v=foj6ujoT_HU&list=PLWIJ2KbiNEyoBDc5yLJ4PaiaY3o5E5xCB
Arty Maths- Times Tables Using the numbered circle shown investigate the different patterns that times tables can make. Take the unit number from a times tables sequence (e.g. in the 3 times table 3, 6, 9, 2, 5,…) and use that sequence to create a linear pattern that travels from one digit to the other. Investigate different times tables patterns on the same numbered circles. Are there any times tables that create the same patterns?   	**Fractal Symmetry drawings.** Experiment drawing with one shape only. For example a square. Decide on your rules, perhaps rotate 45 degrees and shrink shape by 1cm. overlap these shapes on a set point. What designs can you create?  

Straight Lines

Did you know that you can create curves by only drawing straight lines? These curves are called parabolic curves and, if you look closely, you will see that they have been made entirely out of joining the same digits together with straight lines. Download different parabolic grids here https://mrchads.weebly.com/uploads/9/1/3/8/9138245/parabolic_curve_worksheet.pdf

Try joining points together with a range of different colours to create a rainbow pattern or using a drawing pencil leaving you with a design that you could colour in.



Roman Ratio cookies

Not every roman household would have been rich enough to have scales. Imagine cooking without scales. The recipe may have been given in parts like on the right. The parts are mass not volume. Give your child 500g of flour, 500g sugar and 300g butter that they have bought at the Roman market and 10 cups. They cannot afford to buy more of anything but it is OK to have some ingredients left over. It is important to make as many biscuits as possible from these ingredients while maintaining the correct ratio. Can they work out a method using just the cups? Ask them to show their logic on a piece of paper with words or pictures before mixing ingredients. (answer upside down below) (NB: remember 500g of different ingredients don't always take up the same volume e.g. 500g of cornflakes would be more cups than 500g of flour so you can't just do the same volume of sugar and flour.) You could use your cookies to investigate factors. You can watch the video of The Doorbell Rang for some ideas for 12 cookies.

https://www.youtube.com/watch?v=BXtu90JnDkM Assuming you baked 12 cookies you could represent the recipe using the algebraic equation $4f + 2s + 3b = 12c$

Using these costs for the original ingredients can you calculate the cost per cookie? flour cost 20 aureus for 500g, sugar cost 5 aureus for 500g, butter cost 10 aureus for 500g