## Maths and Art

Create a messy geometric picture. Put masking tape onto the canvas in a series of intersecting lines of various lengths and at various angles. Now get messy! Splatter the canvas with paint, the more freeform the better. Allow the paint to dry then remove the tape. What shapes have you been left with?


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, $5, \ldots$.$) and use that sequence to$ 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?


Download a set of tangrams
(https://www.activityvilla ge.co.uk/tangram-colour)

Carefully cut out the tiles and use them to create your own pictures. Can you recreate some of the images below?


Using only 2D shapes what skylines can you design?


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.

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 1 cm . overlap these shapes on a set point. What designs can you create?


Using mathematical symbols and digits create a portrait or a picture. Try to hide some of the symbols and challenge a grown up to try to find them all.


