## How to make an Escher tiling

A tessellation, or tiling, is a way of covering a flat surface using pieces of the same shape. We have all seen squares, rectangles and hexagons make tiling patterns, but artists like M.C.Escher have made beautiful tiling patterns that look very complicated. In this instruction sheet we will teach you how to adapt a simple square tiling to make complex patterns - and then your imagination is the only limit!

If you enjoy making these patterns, you can try experimenting with tilings that start with a triangle instead of a square.


1) Take a square piece of card ( $5 \mathrm{~cm} \times 5 \mathrm{~cm}$ is a good size for an $A 4$ tiling). Draw a line joining the top two corners of the square. It can be straight, squiggly - anything you want. Cut along this line and move the cut out piece to be on the bottom of the square. Secure it with tape.

2) You can make a tiling already with this shape, but you can make it even more interesting by repeating the process with the sides. Draw a line joining the top left corner to the bottom left corner, cut along the line, then stick the piece to the right-hand side of the shape.

3) Your tile is now ready to go! Take a blank piece of A4 paper and use your tile as a stencil to draw around, making yourself a beautiful pattern! Try drawing eyes on your tiles to make them look like animals.

4) To make a different sort of tiling pattern, you can rotate the cut-off pieces around a corner instead of sliding them across to the opposite side. Try experimenting to see how this changes the way that the tiles fit together on the page.

