

# Escher Envy

You need: a computer drawing program

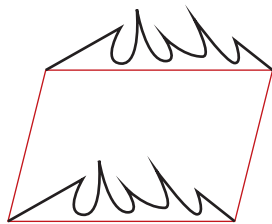
**ACTIVITY ONE**

The Dutch artist M. C. Escher (1898–1972) was famous for his amazing prints. Many of them make clever use of tessellations based on a simple shape that he has distorted. The design on the right is based on a parallelogram. Can you see it?

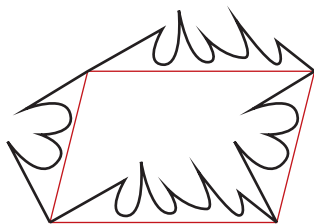


To make your own Escher-style tessellation based on a parallelogram, use a computer drawing program and follow these steps:

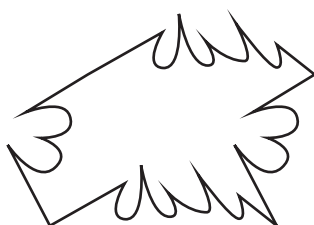
- i.** Draw a parallelogram.
- ii.** Draw an irregular line along the top edge; copy and paste it to the bottom edge.



- iii.** Draw an irregular line along the left edge; copy and paste it to the right edge.



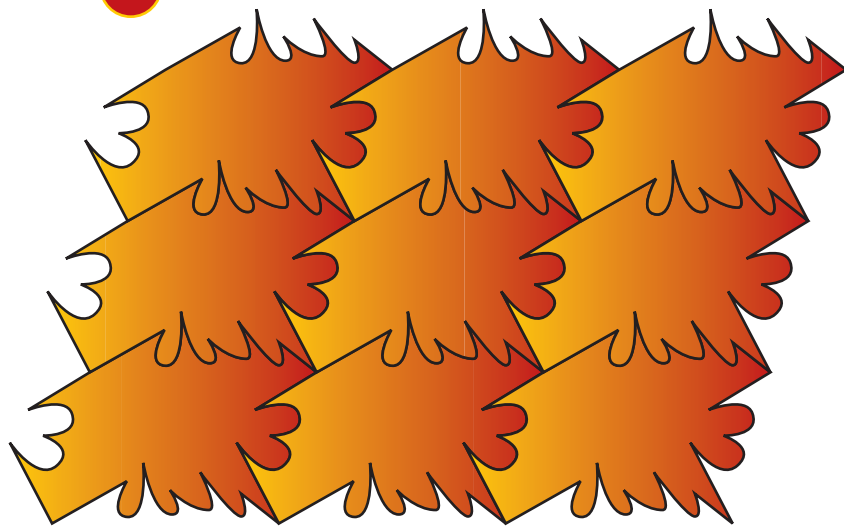
- iv.** Delete the original parallelogram.



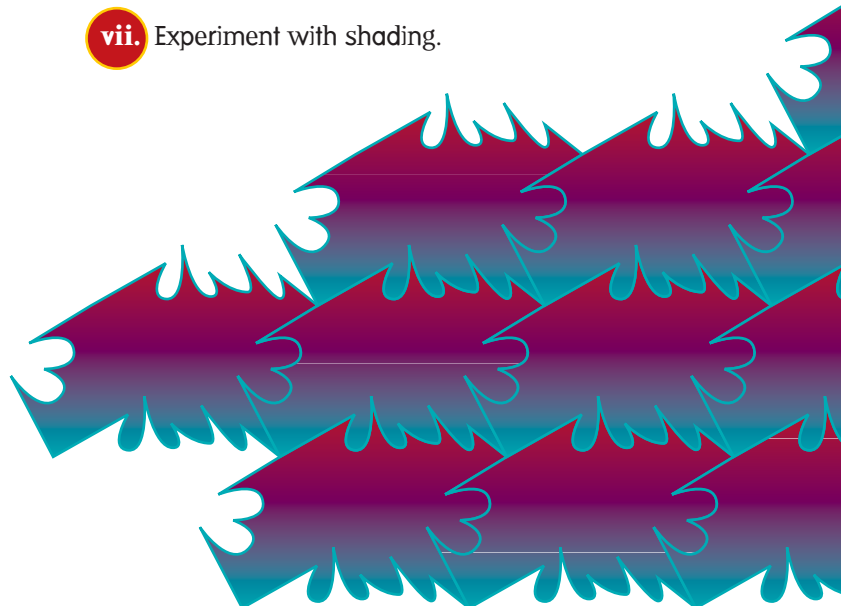
- v.** Give the tile a gradient fill.



- vi.** Copy, move, and paste the tile to make the tessellation.



- vii.** Experiment with shading.



ACTIVITY TWO

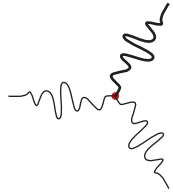
1. The Escher print on the right is based on a hexagon. Follow these steps to make your own tessellation, using the same symmetries:



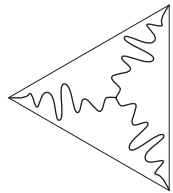
**i.** Using a computer drawing program, draw a squiggle.



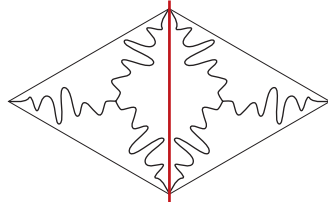
**ii.** Copy and rotate the squiggle 120 degrees about one end. Repeat.



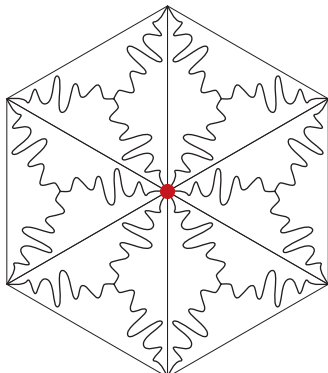
**iii.** Draw an equilateral triangle around your 3 squiggles.



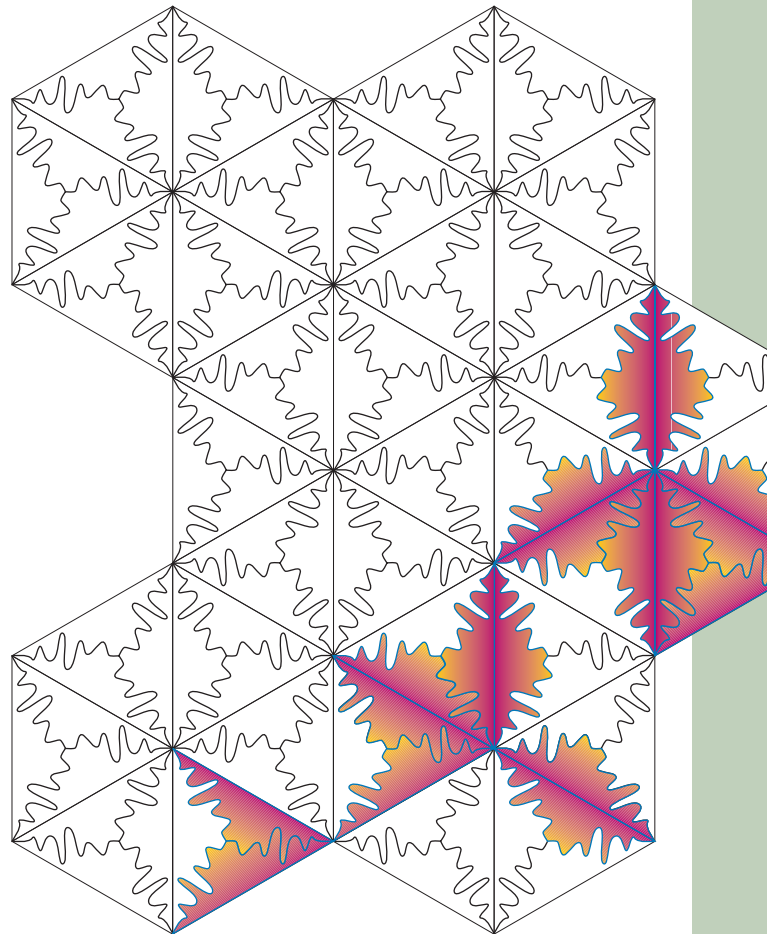
**iv.** Copy and reflect the triangle design about one of its edges.



**v.** Copy the double triangle design and rotate it 120 degrees about the point marked on the diagram with a dot. Repeat.



**vi.** Use the hexagon to tile a surface.



2. Now that you know what to do, create another hexagon-based print. Use textured fills. For a real challenge, see if you can work a recognisable creature or object into your design.

