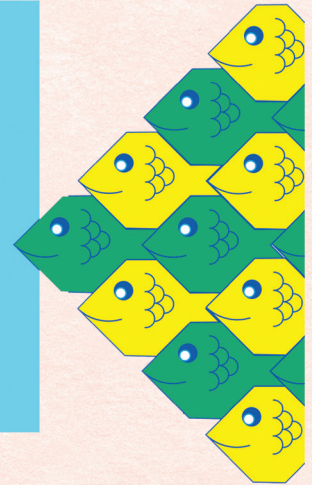
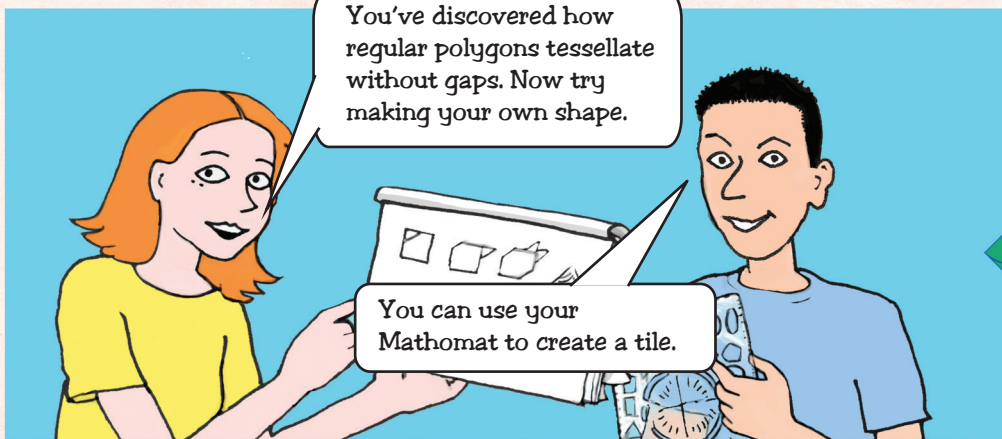


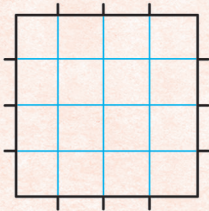
Get creative

Using the Mathomat, create your own tessellating tiles.

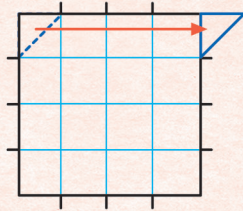


Designing a tile

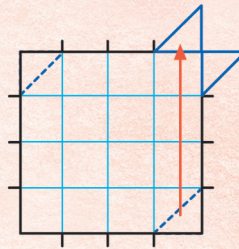
Tiles don't have to be regular polygons to tessellate. You can design your own tessellating tile shapes.



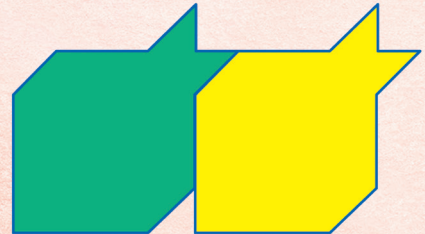
Draw a 4 x 4 grid in pencil using the 25mm square on your Mathomat.



Take a piece from the left side and move it to the right.



Take a piece from the bottom and move it to the top.

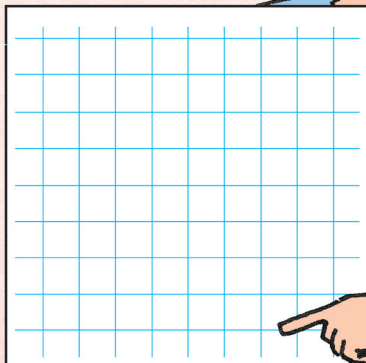


Colour in the shape. Draw the shape again so that it is joined to the first without gaps.

Designing your own tile

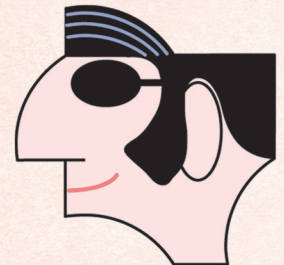
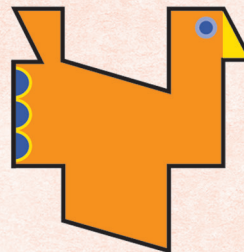
Start with a square or a rectangle.

Draw your tile design here:

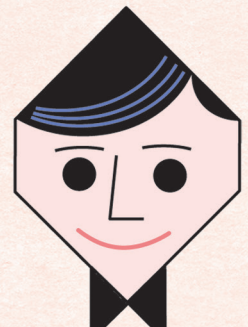
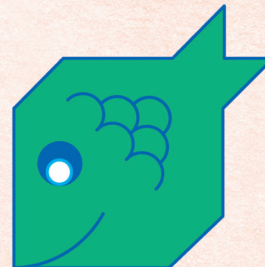


Imagine...

When you have created your tile shape, think about what it could be...a bird, a rock star or...

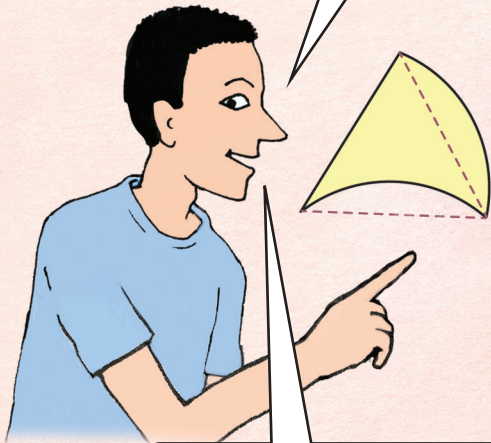


You can rotate your shape.

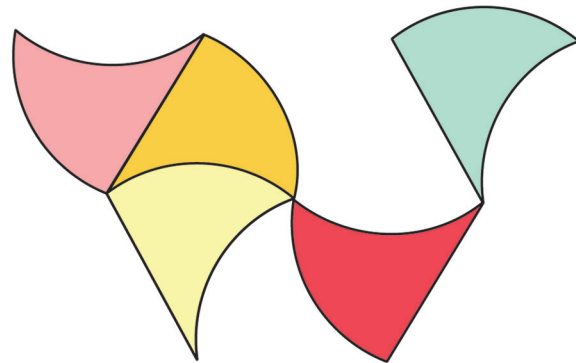


Experiment with the equilateral triangle and hexagon. There are no parallel lines, but by altering the adjacent sides you can create a rotating tessellation.

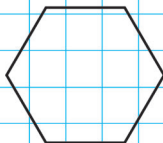
I used a segment from the 40 mm CIRCLE to make a curve out of a triangle.



Use a cut-out template and discover the rotating pattern.



What can you do with the hexagon? Use the space to try out ideas.



Artists and mathematicians have created complex tessellations that make wonderful pictures. We have experimented with just two of many techniques here.

