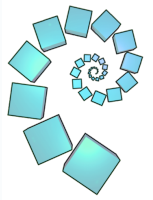
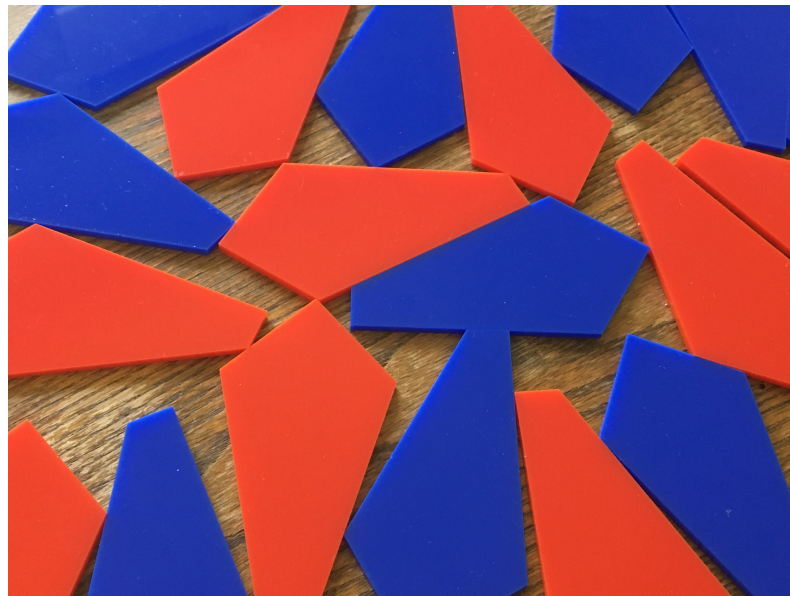


Bow Tie 1



Here are some pentagonal tiles. What shapes can you make when you put them together?



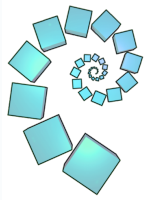
Can you make some shapes that have a hole in?

What shapes of hole can you make?

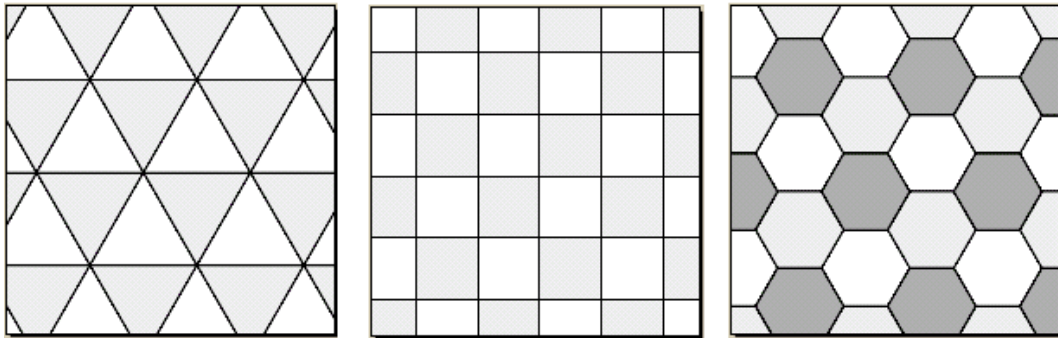
Can you make some shapes with different types of symmetry?

Can you make a shape that has rotational symmetry, but no lines of symmetry?

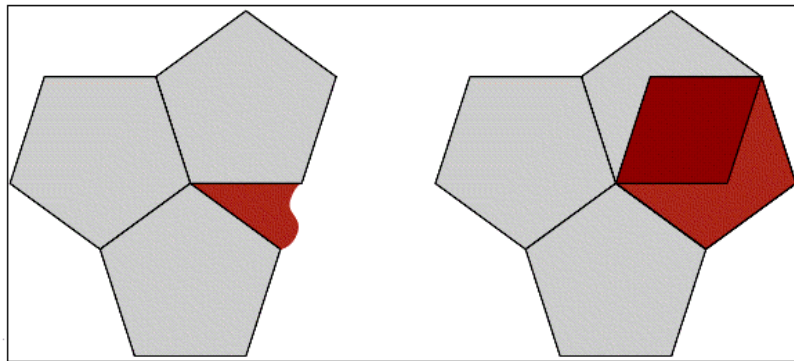
Bow Tie 2



Tessellations fill the whole plane with no gaps and no overlaps. You may have seen tessellations of some regular shapes before. Here are tessellating equilateral triangles, squares and regular hexagons.



It isn't possible to tessellate regular pentagons. When three pentagons meet at a point there is a gap but a fourth pentagon would overlap



There are some irregular pentagons that tessellate the plane. The pieces you have are one example.

Can you figure out how they might fit together to tile the whole plane?