

Y6 TRANSITION ASSIGNMENT

THE ART OF MATHEMATICS : AN ESCHER EXPERIENCE

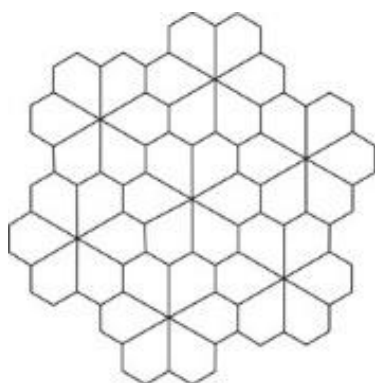
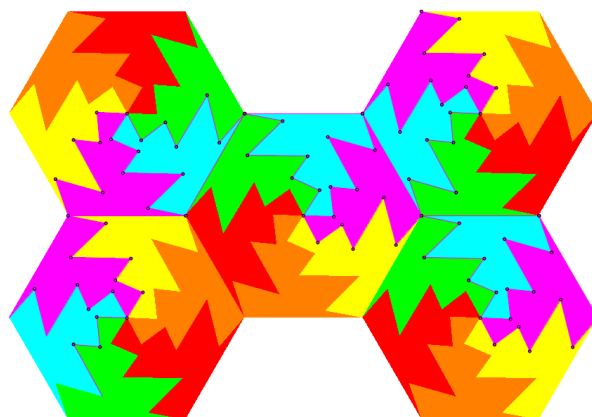
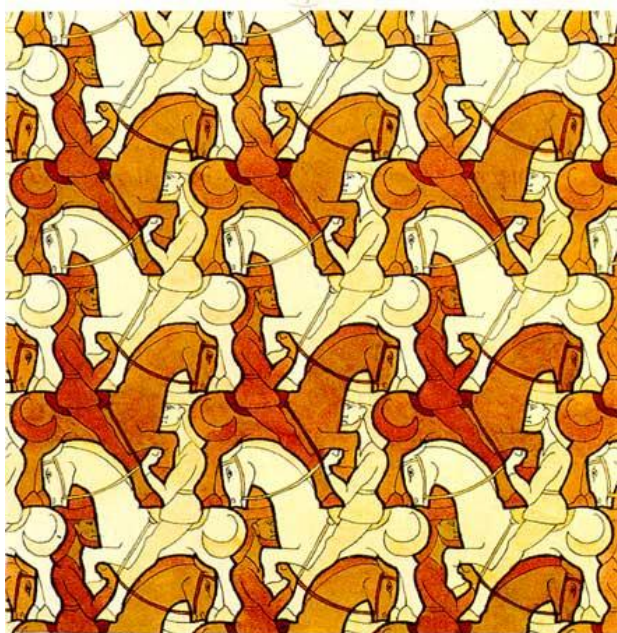


MC Escher (there is a picture of him on the right) was an artist and mathematician. This picture is actually a self-portrait!

He loved working with perspective and created patterns (called tessellations).

A **tessellation** is a puzzle usually made with identical pieces. These pieces fit together leaving no gaps.

Have a look at the examples of tessellations below.



Your task is to create a wallpaper design using your own tessellation shape.

The links below provide tips on how to make a shape that will tessellate.

- ✓ Have a look at <https://nrich.maths.org/4975> to see how to modify a shape to make an interesting Escher tessellation.
- ✓ Also, check out these YouTube videos, which explain step-by-step how to make these tessellations: <https://www.youtube.com/watch?v=FB7AU3d2zUA> and <https://www.youtube.com/watch?v=5FIOF8xsPas> and <https://www.youtube.com/watch?v=pMaQ-AdvD8>
- ✓ If you're feeling more adventurous, why not try out these shapes: https://www.youtube.com/watch?v=NYGIhZ_HWfg or https://www.youtube.com/watch?v=T6L6bE_bTMo

We suggest that you make your template shape by cutting a square (4cm X 4cm) or rectangle (4cm x 3cm) from a sheet of cardboard – a cereal box works well.

You will need a sheet of A4 paper, scissors, tape/glue and coloured pencils (optional) for decorating.

If you have any queries (or would like to share a picture of your artwork with us), please send me an email. We would love to see your tessellations.

Looking forward to meeting you all in September 😊

Mrs Dixon

Head of Mathematics

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Resources

Tessellations with Geometer's Sketchpad 6th Grade; Blumberg, K; https://karenblumberg.files.wordpress.com/2011/01/screen_shot_2011-01-06_at_11-08-25_am_0-scaled10001.png.

Escher flying fish tessellation; <https://i.stack.imgur.com/OtfoZ.jpg>.

Escher Horsemen; <http://hkilter.com/images/b/bf/Eschero2.png>

Pentagon tessellation; https://farm1.staticflickr.com/139/346181133_ee2646c28f.jpg

Escher; http://www.mathacademy.com/pr/mini-text/escher/self_portrait.gif

