Tessellations



Materials: Paper, Scissors, Tape, Pencil, Markers, Crayons

Project Background

Definition:

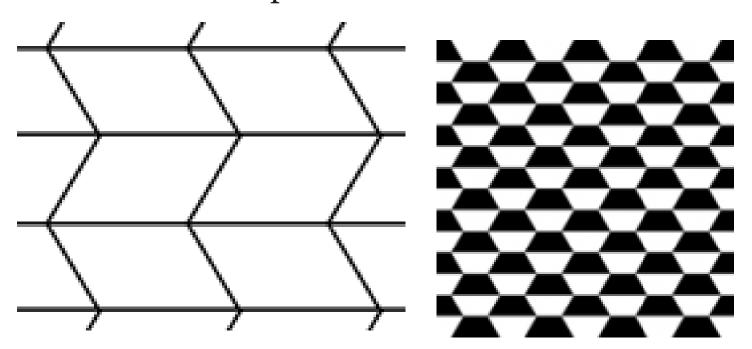
Before diving into making tessellations, let's ask: What is a tessellation?

A <u>tessellation</u> is the tiling of a plane using one or more geometric shapes such that there are no overlaps or gaps. In other words, a tessellation is a never-ending pattern on a flat 2-D surface (such as a piece of paper) where all of the shapes fit together perfectly like puzzle pieces, and the pattern can go on forever.

STEPS:

- 1. Start with a piece of paper and a pencil. We recommend starting with half of a regular 8.5" x 11" white sheet of paper.
- 2. Divide the paper up into equal width rows (or columns); about 3-4 rows for a small sheet will work very well.
- 3. In one row, draw a simple shape that spans the entire height of the row (see image above), such as a square, triangle, a lopsided rectangle (parallelogram), or other shape of your choice. Draw that shape again immediately next to your first shape. Do they fit together perfectly? What if you draw a third shape immediately next to the second shape? Do they still fit together perfectly?
- 4. If your shapes are fitting together perfectly, keep drawing them in each row until your entire sheet is filled up.
- 5. Color in your tessellation and display!

Examples of Tessellations:



Not Examples of Tessellations:

