## Tessellations



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

## Project Background

## Definition:

Before diving into making tessellations, let's ask: What is a tessellation?
A tessellation 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 $11^{\prime \prime}$ 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:


