



Math Mania

Tesselations

A tessellation is a repeating pattern that completely fills a 2D space, like a sheet of paper, without gaps or overlaps. Tessellations can be found in the world, including bricks in a wall, patterns in quilts, and tiles on floors or walls. Where have you been able to see a tessellation pattern?

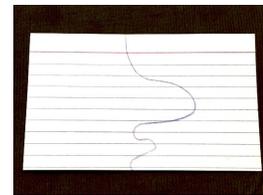
What you need:

- An index card or piece of thick paper or cardboard
- Scissors
- Pen, pencil, or crayon
- Tape
- Larger sheet of paper

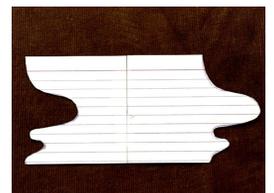
What you do:

1. Start with an index card (rectangle) or a square of stiff paper that is about 3 inches by 3 inches.

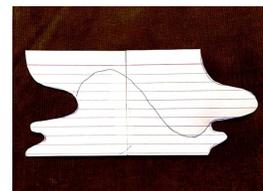
2. Draw a line from one side to the opposite side (you can make it simple or complicated!)



3. Cut along the line you drew and swap the pieces and tape them together.



4. Draw another line on the new shape in a perpendicular direction to the first line.



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5. Cut along this new line, swap the pieces, and tape them together.



6. The resulting shape is your tessellation tile which you can use to make a larger repeating pattern.



7. Place your tile on a larger piece of paper and trace it. Then move the tile next to the traced shape, fitting it like a puzzle piece and trace the tile again. Continue tracing the tile to create your full tessellation design. You can color in the shapes, too, if you'd like.

