

Mr. G's Math Marvels

Theme: Mathematics skills

Lesson: Hands-On Activity- Tessellations

Facilitator: Gary Walton, Mr. G.

BECON Studio Teacher

Lesson Plan

Grade Level: 3

Sunshine State Standard: MA.C.1.2.1, MA.C.2.2.1, MA.C.2.2.2
MA.C.3.2.2

Objective:

1. Students will be able to follow verbal directions to create a pattern from a square piece of heavier paper that measures 3" x 3".
2. Students will be able to cut and remove the design that extends from one vertex to another vertex.
3. Students will be able to slide the removed section to the opposite side and line up the two straight sides.
4. Students will be able to tape the pieces together to create a puzzle piece that tessellates.
5. Students will be able to tessellate their puzzle pieces.

Activity:

1. Begin with a square piece of 65lb paper and create a design on the far right vertical side.
2. The design should begin at the upper right vertex and end at the lower right vertex.
3. After the design is made, cut it out carefully. Do not go back and trim anything.
4. Slide the cut section to the left side and line up the sides perfectly. Hold these two aligned pieces together while a partner tapes the pieces together. Make sure the tape does not stick out over the pattern. This will interfere with your design.

5. Use an 8 ½” x 11” piece of white non-lined white paper and line up the top of your tessellation piece which is flat with the top of the white paper. Trace the pattern and continue this across the paper.
6. Since the bottom of the tessellation piece is also flat it is easy to know where to begin the next row. Simply line up the top the of tessellation pieces with the bottom of the tessellation piece that is traced on your paper.
7. Continue tessellating until your paper is filled. On the sides and bottom your design will hang over the paper. This is normal and adds to the beauty of the tessellation.
8. Go back and color in the pieces that were traced on your paper. If one puzzle piece is embellished with another design, then each piece must have the same embellishment.

Materials Needed: Three inch square of 65lb paper, scissors, pencil, scotch tape, blank piece of copy paper, crayons or colored markers.