# LESSON plan  education 


artworks


## INTRODUCTION

The Multi-Flexagon is a geometric piece of art that flips and turns to present many different sides and shapes to the viewer. The art teacher may choose many different themes for the work. Students will create designs based on the art teacher's criteria. Some theme suggestions are: the elements of art and principles of design, cultural patterns and designs, photo-collage, and more.

## OBJECTIVES

Students will...

- Create a multi-sided piece of art that allows the viewer to interact with the work.
- Identify the terms equilateral triangle, rectangle, octagon, and square.
- Create a design on each side of the multi-flexagon according to the instructor's choice.


## INSTRUCTIONS

1. Cut four pieces of tag board, 8" $\times 4$ " each. (Figure 1)
2. Make two dots 2" from the edge of the 4" sides of the tag board, then draw a line through the two dots. Repeat for all four pieces of tag board. (Figure 2)
3. With an open scissor, lightly score along both lines on each piece of tag board so the 2 " sides will bend. (Figure 3)
4. Make a mark on the edge of the tag board 2" from the side. Draw two lines from the mark to the scored lines, creating two triangles. Cut along the lines of the triangles. Draw a line down the center of the triangle. Do this for all four pieces of tag board. (Figure 4)
5. Glue outer triangles. Position two hexagons side-by-side vertically and the other two hexagons horizontally. Place the two horizontal hexagons on top of the two vertical hexagons, so the glue touches the glue. Triangle A should be glued with triangle A, and triangle B with triangle B. When dry, flip and turn several times to make it turn easily. (Figure 5)
6. Create a different design based on the theme given by the teacher. (Figure 6)

## figure 1




As the students flip the sides of the Multi-Flexagons, new designs will be revealed on the alternating sides.


MATERIALS LIST

- Nasco No. 2 Pencils, Box of 12 - 9728094
- Nasco Country School ${ }^{\text {M }}$ All-Purpose Glue, 8 oz. - 9729648
- PRISMACOLOR® Premier Double-Ended Primary and Secondary Art Markers, Set of 12 - 9705293
- PRISMACOLOR® Premier Colored Pencils, Set of 24 - 9703252
- Nasco Country School™ 5" Pointed Scissors - 9726127
- Pacon ${ }^{\circledR}$ White Tag Board Assortment - Medium (150 lb.), Pkg. of 50, 221⁄2" $\times 281 / 2^{\prime \prime}$ - 9700995(A)
- Sharpie ${ }^{\circledR}$ Fine-Point Black Marker - 9726841(A)
-12" Aluminum Ruler - 2100207

VOCABULARY
Rectangle
Square
Octagon
Equilateral Triangle


