



Developed with Donna Sinisgalli, New Jersey

# Multi-Flexagon

Volume 71 | Gr. 9-12

Time: 2-3 class periods



## Standards

### VA:Cr1.2.Ia

Shape an artistic investigation of an aspect of present-day life using a contemporary practice of art or design.

### VA:Cr1.2.IIIa

Choose from a range of materials and methods of traditional and contemporary artistic practices, following or breaking established conventions, to plan the making of multiple works of art and design based on a theme, idea, or concept.

### VA:Cr3.1.IIIa

Reflect on, re-engage, revise, and refine works of art or design considering relevant traditional and contemporary criteria as well as personal artistic vision.

## Introduction

The multi-flexagon is a geometric piece of art that flips and turns to present many different sides and shapes to the viewer. Students will create designs based on the art teacher's criteria or their chosen theme. Some theme suggestions are: the elements of art and principles of design, cultural patterns and designs, or photo-collage.

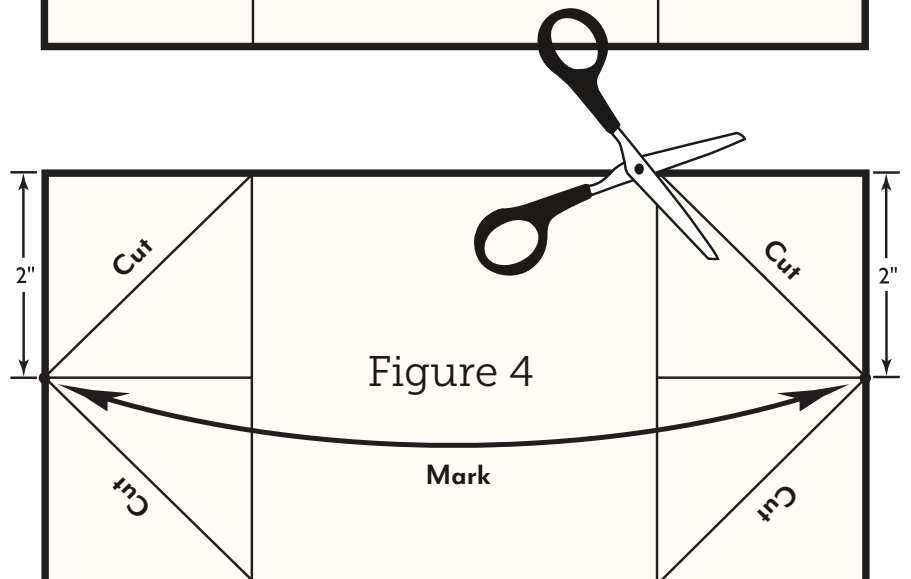
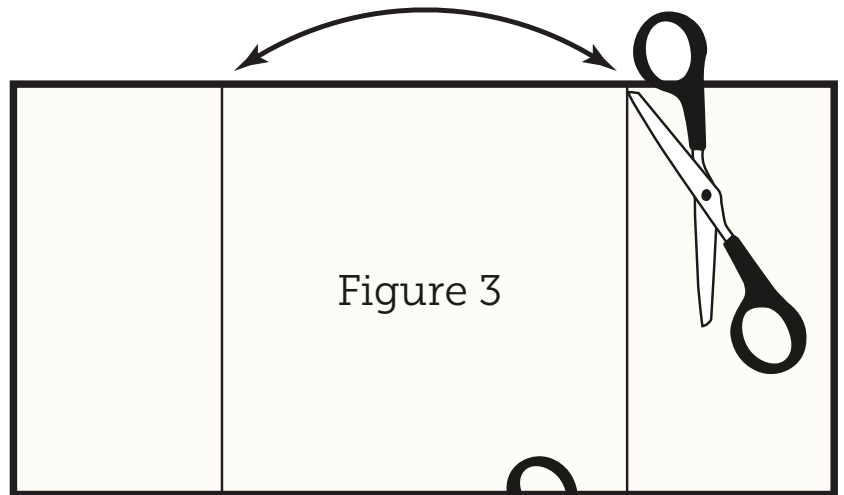
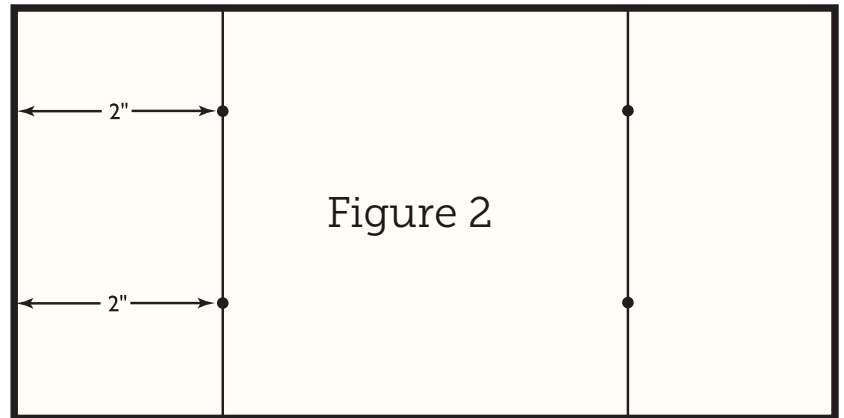
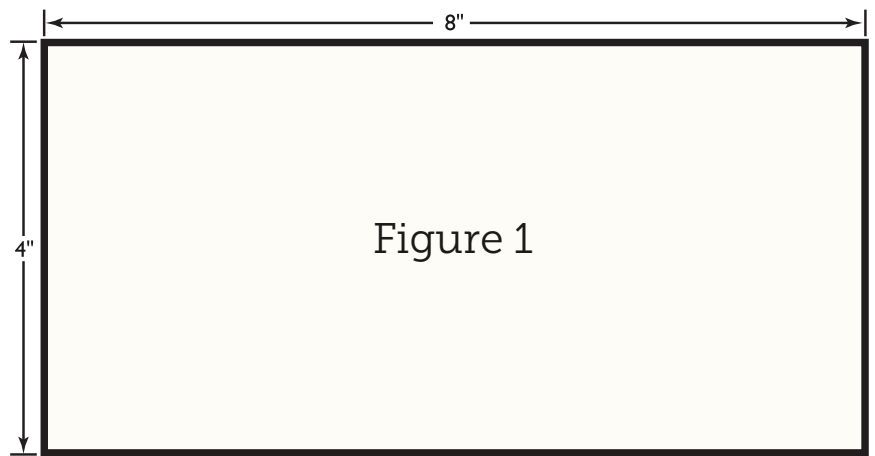
## Objectives

*Students will be able to...*

- 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" x 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 scissors, 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)



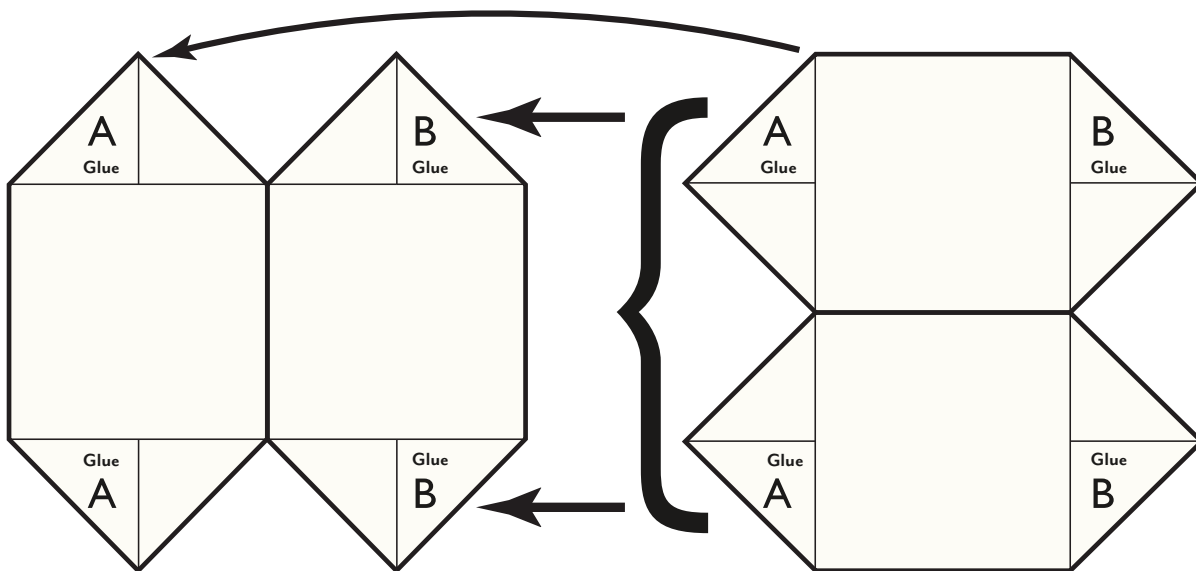


Figure 5



Figure 6



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 — Sharpened, Pkg. of 144 ([NE20211](#))
- Nasco Country School™ 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® White Tag Board Assortment — Medium (150 lb.), Pkg. of 50, 22½" x 28½" [[9700995\(A\)](#)]
- Sharpie® Fine-Point Black Marker [[9726841\(A\)](#)]
- 12" Aluminum Ruler ([2100207](#))

## Vocabulary

Rectangle

Square

Octagon

Equilateral Triangle