

# **Mondays with MoMA**



**MoMA**

## Step 1 Look closely

### Questions

1. What shapes and lines do you see?
2. How did the artist repeat one shape in different positions and configurations to create this composition?
3. How are the shapes and lines connected, joined, interlaced, and overlapped?

## Step 2 Learn more

Frank Stella is a painter, sculptor, and printmaker who was part of the Minimalist movement in the 1960s. Minimalist artists avoided representation and used simplified geometric forms. They often used mathematical concepts to determine the composition of their works.

This drawing shows different kinds of symmetry. Symmetry is when an object looks the same after a flip (reflection), slide (translation) or turn (rotation). Learn about transformations like reflection, rotation, and translation here: [www.mathsisfun.com/geometry/transformations.html](http://www.mathsisfun.com/geometry/transformations.html)

This sketch may be part of Stella's Protractor series. In this series of paintings, Stella repeated the semicircular shape of the protractor to create paintings with bright arcing bands of color. Hear Stella talk about these works: [www.sfmoma.org/watch/frank-stella-and-the-art-of-the-protractor/](http://www.sfmoma.org/watch/frank-stella-and-the-art-of-the-protractor/)



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## Step 3 Activity: Make a composition with different kinds of symmetry

Materials: paper, cardboard, pencil, ruler, scissors, and colored pencils or markers

1. Use a ruler (or protractor or geometry compass) to draw a geometric shape on cardboard or heavy paper. Cut out the shape with scissors.
2. On a new sheet of paper, trace around the shape with a pencil.
3. Rotate (turn), reflect (flip), or translate (slide) the shape, tracing after every transformation. Feel free to connect and overlap the shapes. Keep repeating this until you are happy with your composition.
4. With colored pencil, marker, or crayon, color in your composition emphasizing the new shapes and lines you were able to create.

## Step 4 Share!

Share your composition with a classmate and see if they notice the transformations and symmetry. Or you can email a photo of your artwork to us at MoMA: [schoolprograms@moma.org](mailto:schoolprograms@moma.org).

Image: Frank Stella. *Untitled*. (1965). Felt-tip pen and colored ink on graph paper. Gift of the artist. © 2021 Frank Stella / Artists Rights Society (ARS), New York