“Optical Illusions”

Objective: Students will use lines and shapes to create an optical illusion

Materials
- White construction paper 12x12
- Sharpie markers
- Ruler and Compass
- Variety of shapes to trace
- Erasers

Motivation
- Show students examples of Op Art, such as works by Victor Vasarely from the 1960’s.
- The goal of Op Art was to fool or trick the eye by combining and layering different shapes, patterns and lines. Black and white were often used.
- Where have you seen optical illusions in your everyday life?

Step 1: Demonstration
Show students the basics of starting an optical illusion. When you change the shape or change the pattern, an illusion will result. Give students a handout with a variety of background options.

Step 2: Drawing
Choose a pattern for your background. You could do stripes, a checkerboard, zig zag, etc. It is your choice, but the background should cover the entire paper. Map this out in pencil first.

Choose 2 or more shapes to layer over the top of your background. The pattern inside the shape must be different from the background pattern. Make your marks in pencil first.

Label using an X or small line every other section in both your background and shapes. The areas with a mark will get colored in black. The areas without will stay white. It's important to label because this will prevent any mistakes when you start in permanent marker.

Step 3: Sharpie
Using a black permanent marker, carefully color in all of the sections you marked in pencil. If there are mistakes along the way, whiteout works great.

The goal of this is to trick the eye. Hold your paper back for a neighbor. Does it fool their eye or make them dizzy? Did you change pattern each time you created a new shape?