

Converging Lines Op Art



Grade: 3rd

Medium: Drawing

Learning Objective: Students will draw and understand an optical illusion using converging lines, complementary colors and repetition.

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Elements of Art

Color: the visible range of reflected light. **Complementary colors:** colors that are opposite one another on the color wheel, such as yellow/violet, blue/orange, and red/green.

Line: a mark between two points. (In this lesson, various types of lines are used: **Converging:** Lines that come together and approach a meeting point or actually meet. **Diagonal:** Lines from opposing corners. **Vertical:** the up-and-down orientation of a line, shape, or form. **Horizontal:** a line that is parallel to the horizon.)

Shape: a 2-dimensional (flat) area enclosed by a line, either geometric or organic. In this lesson geometric shapes are used. Shapes can be geometric or organic. They are flat, express length and width.

Form: an element of visual arts; a three-dimensional object that has height, length, width, and depth. A cylinder, cube, sphere. **2-dimensional:** having width and height. **3-dimensional:** having actual height, width, and depth and existing in three-dimensional spaces; or having the illusion of existing in three dimensions. **Implied forms:** 3-dimensional forms that are implied in the 2-dimensional drawing by use of shading and value giving depth where none exists.

Value: relative lightness and darkness.

Principles of Design

Focal Point: the part of an artwork that is emphasized in some way and attracts the eye and attention of the viewer; also called the center of interest

Repetition: the repeated use of particular elements of visual arts to create a pattern, movement, rhythm, or unity.

Additional Vocabulary

Optical: Having to do with vision or occurring visually but not necessarily physically.

Optical Illusion: Something that occurs visually but not physically. This occurrence “tricks” the eyes into thinking something is really happening when it is not.

Optical art (Op Art): Abstract art that uses optical illusions as the subject matter

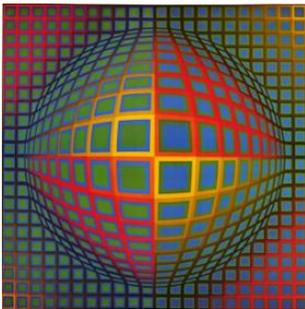
Cones: a solid or hollow object, which tapers from a circular or roughly circular base to a point.

Materials & Supplies

- black permanent marker
- wide tip colored marker pens
- colored pencils
- white paper
- ruler
- glue stick
- photo of student
- scissors

Context (History and/or Artists)

Op Art is short for ‘optical art’. The word optical describes how our eyes see. Op Art is a form of abstract art that uses shape, line, color and pattern to create an illusion of movement, hidden imagery, vibrating patterns, or warping shapes.



Vega-Nor – Victor Vasarely 1969

Considered the father of the Op Art, Victor Vasarely was born on April 9th, 1908 in Hungary. Internationally recognized as one of the most important artists of the 20th century, his innovations in color and optical illusion have had a strong influence on many modern artists. Spanning most of his career, our collection of his prints and sculptures explores his forays into some of his most famous works such as the plastic alphabet and other iconic periods.



Pause - Bridget Riley 1964

Born in London in 1931, Bridget Riley is a skilled artist trained in painting, drawing and sculpture most famous for her involvement in the Op Art movement of the 1960s. Her artwork contains geometric elements and her use of shapes and value tricks your brain into thinking they are moving, a very cool effect. Students love looking at examples of her work.

More information about Bridget Riley and her work can be found here:

Slideshare <https://www.slideshare.net/gmoustaka/optical-illusions-bridget-riley1>

Tate <https://www.tate.org.uk/kids/explore/who-is/who-bridget-riley>

Advanced Preparation

Capture and print photos of each student in a movement or falling pose; as if falling into a tunnel.

Tips & Tricks

Allow one hour for the lesson but if you are concerned you will be short on time, you could have the photos pre-cut.

Discussion Points

- Review the terms and show examples of Optical Art (Op Art). Point out the lines, colors, and values that create the illusion of depth in a 2-dimensional work.
- Discuss shape vs. form.
- Demonstrate for students the elements they will be creating implied forms using:
 - shading - by creating a gradation of value, darker areas seem to recede, the triangles will give the impression of being cones.
 - complementary colors – high contrast, like in Bridget Riley’s work, helps create the impression of movement
 - curved lines – drawing curves lines makes our brain think the image is actually curved.

Students will create a focal point in the artwork with their image as if falling into the tunnel of converging lines.

Reflection Point (Assessment of Learning Objectives)

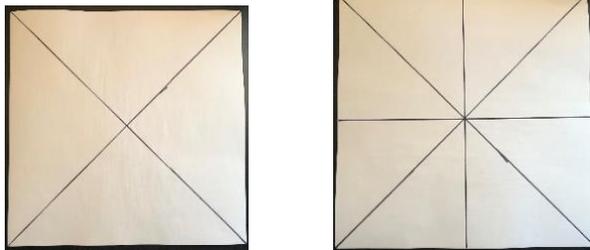
Did the student create a work of art following the directions as given?

Did the student draw convergent lines? Choose complementary colors schemes? Use curved lines to create a 3D look? Demonstrate creating value using colored pencils? Provide a focal point?

Instructions for Lesson

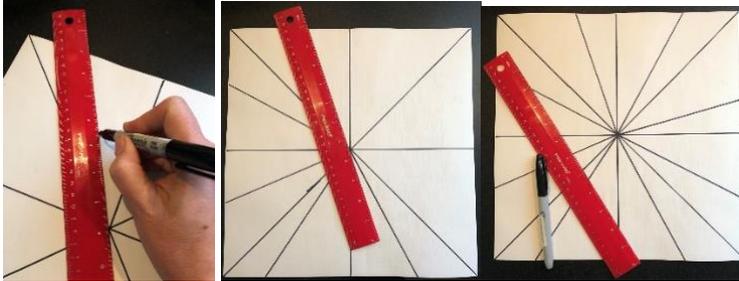
Demonstrate for your students and then have them follow you steps 1 through 6.

1. Find the center of the paper by drawing two straight diagonal lines from corner to opposite corner with the ruler, creating an X.

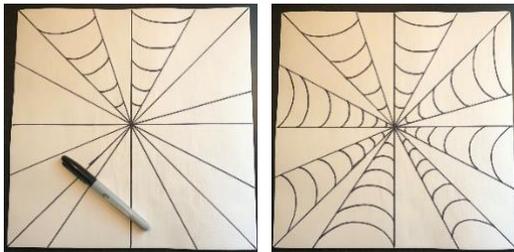


2. Draw two straight perpendicular lines using the ruler
 - a. which run from top edge, through the center intersection, to the bottom edge
 - b. which runs from side, through the center intersection, to the other side

3. Draw another diagonal line in each triangle that starts at the paper's edge and ends in the center intersection. These sections may be different sizes, which is fine. Most importantly the students will have an even number of sections to work with.



4. Draw "smiley face" lines spaced about an inch apart, on every other triangle to create stripes. The curved lines create an impression of a round cone instead of a triangle.



5. Color alternating sections of the smiley faces with one of the complementary colors.

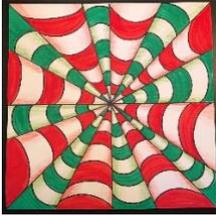
6. Create the 3-dimensional look by shading, using a colored pencil of the same color, the "outside edges" of the white sections within that triangle.



7. Draw "sad faces" on the rest of the triangles, spaced about an 1" apart, creating stripes.

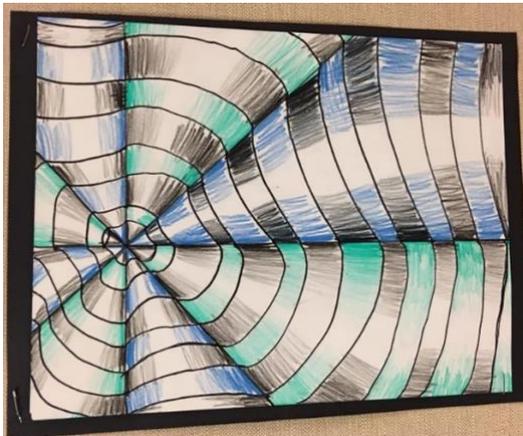


8. Color these stripes with the complement to the color you previously used.
9. Shade using a colored pencil of the same color, the “outside edges” of the white sections within that triangle.



10. Using scissors, cut closely around the student’s image and glue to the center of the converging lines creating a focal point.

Examples:



References and Attributions

Lesson written by Heather McClure-Coleman, Angie Warren. Converging Lines Op Art Lesson examples provided by Issaquah Valley Elementary art docents: Ki Lan Black, Angie Bogaarts, Andrea Hackney, Jamie Rydberg and Rachel Santoy.

Victor Vasarely bio <https://www.masterworksfineart.com/artists/victor-vasarely/biography> and artwork: <https://www.masterworksfineart.com/artists/victor-vasarely>

Bridget Riley Slideshare: <https://www.slideshare.net/gmoustaka/optical-illusions-bridget-riley1>;
Tate: <https://www.tate.org.uk/kids/explore/who-is/who-bridget-riley>; Dream Idea Machine:
<http://www.dreamideamachine.com/en/?p=4345>

Notes for Educators

21st Century Thinking Skills

Abstract thinking, Critical thinking.

WA State Learning Standards

Cr2.2.3 Demonstrate an understanding of the safe and proficient use of materials, tools, and equipment for a variety of artistic processes.

Cr3.1.3 Elaborate visual information by adding details in an artwork to enhance emerging meaning.

Re7.1.3 Speculate about processes an artist uses to create a work of art.

Re8.1.3 Interpret art by analyzing use of media to create subject matter, characteristics of form, and mood.

Arts Integration Opportunities

Math lessons on geometric forms such as spheres, cubes, cylinders, cones, and pyramids.