

Anaglyph Artistry

Make a composition for viewing with 3-D glasses!

(art + science)

Anaglyph images were invented in 1853 by Wilhelm Rollmann. An anaglyph is a moving or still picture made up of two slightly offset but identical drawings in contrasting colors (usually red and cyan) that are superimposed on one another to produce a three-dimensional effect when viewed through two correspondingly colored filters. The lenses in anaglyph 3-D glasses were typically red and green until the 1970s, when manufacturers began using red and cyan (blue) lenses.

It was Louis Ducas du Hauron, however, who gave us the first printed anaglyphs, produced in 1891. His process consisted of printing two slightly offset negatives on the same paper, one in blue (or green), and one in red. The viewer would then use colored glasses with red (for the left eye) and blue or green (for the right eye). There are many different types of 3-D glasses. The most common 3-D glasses (the ones with red and cyan lenses) produce a three-dimensional effect through a process known as anaglyph color filtering. There are various other types of 3-D glasses, but they all work in the same manner — by tricking the brain into seeing a three-dimensional image from a two-dimensional source.

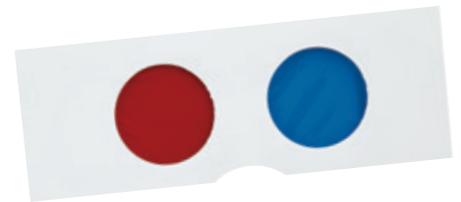
Over the years, anaglyphic pictures have sporadically appeared in comics and magazine ads. 3-D comic books are one of the most interesting applications of anaglyph use.

An original drawing can easily be turned into an anaglyph using red and blue transfer paper, and red and blue markers. Bristol board and cellophane are used to create the 3-D glasses necessary to make it pop!

GRADES 2-12 Note: instructions and materials are based upon a class size of 24 students. Adjust as needed.

Process - Anaglyph

1. Make a line drawing on the piece of 9" x 12" drawing paper. The drawing can be simple or complex, keeping in mind that only lines will be transferred. Shading techniques won't work for this process.
2. With a ruler, draw a vertical line 1/8" in from the right edge of the bristol board. Draw a horizontal line 1/8" up from the bottom edge of the bristol board. Place the red transfer paper on top of the bristol board. Align the right edge of the drawing paper with the line 1/8" in from the edge of the bristol board, and place the bottom edge of the drawing paper on the line 1/8"



Materials (required)

Blick[®] White Sulphite Drawing Paper, 500-sheet ream, 9" x 12" (10209-1013); share one ream across class

Staedtler[®] WOPEX[®] No. 2 HB Pencils, 12-pack (20343-1010); share two packages across class

Hygloss[®] Transparent Cellophane, 20" x 25-ft roll, Red (11219-3025) and Light Blue (11219-5025); share one roll of each color across class

Blick Studio[®] Bristol, smooth, 9" x 12", 15-sheet pads, (13329-2023); share two pads across class

Saral[®] Wax Free Transfer Paper, 12-1/2" x 12-ft roll, Red (12917-3012) and Blue (12917-5012); share one roll of each color across class

Blick[®] Studio Markers, Red (22148-3010) and True Blue (22148-5080); need one of each color per student

Blick[®] White Blue, 16-oz (23882-1006); share one bottle across class

Snippy[®] Scissors, pointed, 12-pack (57040-2005); share two packages across class

McGill[®] Circle Punch, 1-11/16" (61825-1007); share two across class



Process - Anaglyph, continued

up from the bottom edge of the bristol board. Go over the drawing with a pencil, making sure not to miss any lines. You will now see the drawing in red on the bristol board.

3. Go over the transferred red lines with red marker to fatten them up.
4. Place the blue transfer paper onto the bristol board. Align the right edge of the drawing paper with the right edge of the bristol board, and the bottom of the drawing paper with the bottom of the bristol board. Go over the drawing a second time with the pencil to transfer the drawing in blue. Blue lines will be offset from red lines by 1/8".
5. Go over the blue lines on the bristol board with the blue marker to thicken them up and make them more visible.

Process - 3-D Glasses

1. Cut a 9" x 12" piece of paper in half. This half-piece will be used to create the "viewing glasses" for the composition. First, fold in half length-wise, and using a 1-11/16" round punch, punch out lenses and a half circular bump for the bridge of the nose. There will be room left on the side for holding the glasses when in use.
2. Open the glasses up and glue a piece of red cellophane onto the left lens of the glasses, and a piece of blue onto the right lens. Fold the glasses back together and glue shut.
3. View the Anaglyph with the 3-D glasses and watch it pop!

National Standards for Visual Arts Education

Content Standard #1 — Understanding and applying media, techniques, and processes.

K-4 Students describe how different materials, techniques, and processes cause different responses

5-8 Students intentionally take advantage of the qualities and characteristics of art media, techniques, and processes to enhance communication of their experiences and ideas

9-12 Students apply media, techniques, and processes with sufficient skill, confidence, and sensitivity that their intentions are carried out in their artworks

Content Standard #6 — Making connections between visual arts and other disciplines.

K-4 Students understand and use similarities and differences between characteristics of the visual arts and other arts disciplines

5-8 Students describe ways in which the principles and subject matter of other disciplines taught in the school are interrelated with the visual arts

9-12 Students compare the materials, technologies, media, and processes of the visual arts with those of other arts disciplines as they are used in creation and types of analysis



Step 1: Transfer drawing using red and blue transfer paper. Slightly offset the second transfer.



Step 2: Go over transferred drawing with red and blue marker.



Step 3: Create 3-D glasses using round punch and glue red and blue cellophane to lenses.