

## Classroom Chihuly

### Glass-like pieces that form in hot water

In the last decade, colorful formed glass has exploded in popularity with the advance of breath-taking techniques perfected by artists such as Dale Chihuly. Although art glass is exciting to show students in the classroom, the hand-formed techniques are elusive due to the cost of equipment and safety concerns. This project gives students an opportunity to enjoy creating a random organic form with color and transparency similar to actual glass. It incorporates Dura-lar™, a crystal-clear polyester film, a

low-temperature heat source and water-based glass paints, and the results are so stunning, you'll want to start planning your own "installation".

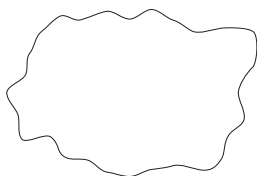
**GRADES 3-12** Note: instructions and materials are based upon a class size of 25 students. Adjust as needed.

### Preparation

1. If possible, visit a museum or gallery that features glass artwork. Look at the works of Dale Chihuly, especially the "Seaform" series and "Persian Ceiling" installations ([www.chihuly.com](http://www.chihuly.com))
2. Use scissors, craft knife or paper cutter to cut Dura-Lar into pieces approximately 6" x 8" in size.

### Process

1. Pre-heat water in skillet to about 200°F. Skillets heat at a wide variety of temperatures - if steam is rising from the water it is hot enough. Do not heat past boiling. Too high a temperature will cause Dura-Lar to melt and release fumes.
2. Cut the Dura-Lar into a free-form oval, with multiple, random scalloped edges, see illustration below.



### Materials

Graphix<sup>®</sup> Dura-Lar™ Clear Acetate  
Alternative:

For rigid, glass-like pieces (see painted example, above) — .015" thick extra-heavy 18" x 24" sheet (55506-1009); share one between 9 students

For flexible, more economical pieces (see unpainted example) — .007" heavy 25" x 40" sheet (55506-1307); share between 20 students

Pebeo<sup>®</sup> Porcelaine 150, assorted transparent colors such as Marseille Yellow (02908-4753), Tourmaline Red (02908-3753) and Lapis (02908-6423); share 3 among class

Sharpie<sup>®</sup> Oil-Based Paint Markers, assorted medium-point colors including Silver (22100-9330) and Black (22100-2020); share 3 among class

Blick<sup>®</sup> Scholastic Camel Hair Round Brushes, size 6 (05867-1006); need one per student

Armada<sup>®</sup> Lollypop Scissors (57057-1007); one per student

Paper Clips

Heavy-duty dishwashing gloves

Electric Skillet with temperature control



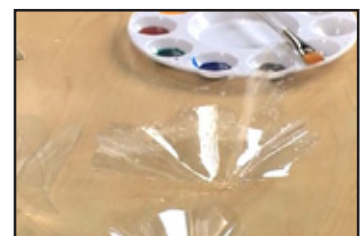
Step 1 — Roll or fold into a conical shape.



Step 2 — Secure with paper clips.



Step 3 — Drop into heated water in skillet.



Step 4 — Remove paper clips and unfold.

## Process, continued

3. To form a piece:

### Method A - Elementary/Middle

- Roll or fold pieces into a conical shape and secure with paper clips.
- Place in the skillet for the students, so they don't have to be near hot water. Soak for 30-45 seconds, use tongs or gloves to remove from the hot water. Make sure the piece is drained before removing the clips.- Once clips are removed, the piece may be too tightly closed. As an option, dip the bottom of the piece back in the hot water to loosen it back into a bowl shape.

### Method B - High School

- Wearing heavy-duty dishwashing gloves, hand-form the piece in water. Grasp on either side and form a bend. Hold beneath the surface for a few seconds. The piece can be pressed against the bottom of the pan to form bends as well.

#### NOTES:

- This hand-forming method works best with .015" Dura-Lar. The thicker the material, the more pliable.
  - Dura-Lar does not retain heat, so it will not form outside the hot water. Once it is removed from the heat, it will cool immediately and hold the bend. It cannot be molded into more complicated shapes and will not adhere to itself when heated.
  - Once a bend has been formed in the Dura-Lar, it will flatten again if it is placed back in the hot water.
  - Dura-Lar is not intended to be melted or pressed into molds.
4. Paint the back side with transparent glass paint, so the front stays smooth and glossy. Leaving some areas thick and some areas thin will look more like glass. Blend colors while still wet.

#### NOTES:

- Do not heat set the colors. They will dry hard.
5. Once the paint is dry, carefully define the shape by running a paint marker along the edge of the piece

## Options

1. Create smaller pieces to "nest" inside larger ones.

## National Standards for Visual Arts Education

**Content Standard #3** — Choosing and evaluating a range of subject matter, symbols and ideas

**K-4** Students explore and understand prospective content for works of art

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

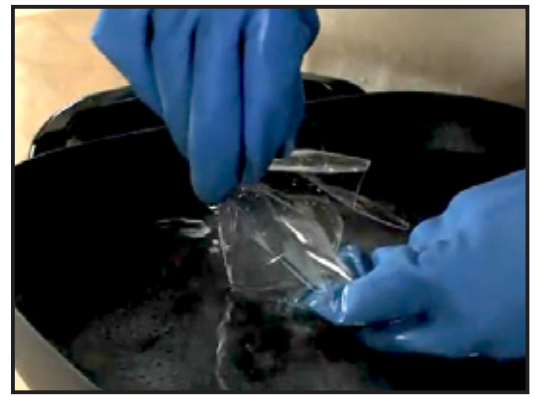
**9-12** Students conceive and create works of visual art that demonstrate an understanding of how the communication of their ideas relates to the media, techniques and processes they use

**Content Standard #5** — Reflecting upon and assessing the characteristics and merits of their work and the work of others

**K-4** Students identify specific works of art as belonging to particular cultures, times and places

**5-8** Students analyze contemporary and historic meaning in specific artworks through cultural and aesthetic inquiry.

**9-12** Students explore the implications of various purposes and justify their analysis of purposes in particular work



Step 1 — Bend the piece and hold it in the hot water.



Step 2 — Paint with transparent color.



Step 3 — Define the edges with a Paint Marker.



Step 4 — Create smaller pieces to "nest" inside larger ones.

