

# Classroom “Chihuly”

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”.



Finished pieces formed with .015" Dura-Lar

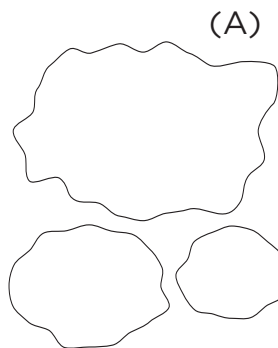
**Grade Levels** 5-12

## Preparation

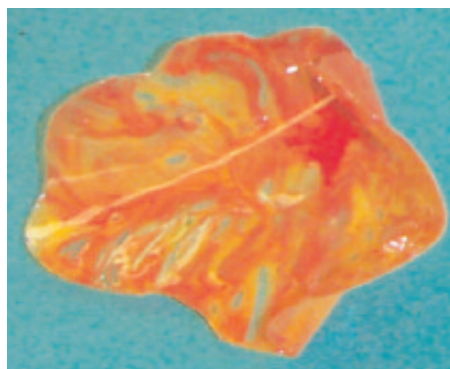
1. If possible, visit a museum or gallery that features glass artwork. Look at the works of Dale Chihuly, especially the “Seaform” series and “Persian Ceiling” installations ([www.chihuly.com](http://www.chihuly.com))
2. Use scissors, craft knife or paper cutter to cut Dura-Lar into pieces approximately 5" x 7" in size. Each student will need 2 pieces.

## 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. Have students take one piece of Dura-Lar and cut it down into a free-form oval, with multiple, random scalloped edges. Have them cut 2 smaller shapes out of the second piece (see A).



Unpainted piece formed with .007" Dura-Lar



Painted piece formed with .007" Dura-Lar

## Materials

### Dura-Lar™ Clear Polyester Film

For rigid, glass-like pieces (see painted example, above), use .015" thick extra-heavy 18" x 24" sheet (55506-1009)  
For flexible, more economical pieces (see unpainted example), use .007" heavy 25" x 40" sheet (55506-1307)

### Pebeo Porcelaine 150,

assorted transparent colors such as Marseille Yellow (02908-4753), Tourmaline Red (02908-3753) and Lapis (02908-6423)

### Sharpie Oil-Based Paint Markers,

assorted medium-point colors including Silver (22100-9330) and Black (22100-2020)

Blick Scholastic Camel Hair Brushes (05867-0099)

Armada Lollypop Scissors (57057-1007)

Paper Clips

Heavy-duty dishwashing gloves

Electric Skillet with temperature control

## Process, continued

### 3. To form a piece:

#### Method A - Junior High/Middle School

- Students can roll or fold their pieces into a conical shape and secure with paper clips (see photo B).
- Then, the pieces can be placed in the hot water for the students, so they don't have to be near the hot water. Soak for 30-45 seconds, use tongs or gloves to remove from the hot water. Make sure hot water is drained from the piece 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 (see photo C).

#### Method B High School Ages

- Students can put on heavy-duty dishwashing gloves and hand form the pieces in the water. Grasp the piece on either side and form a bend (see photo D). Hold in the water as illustrated in photo (E). The piece can be pressed against the bottom of the pan to form bends as well. It will begin to form in just a few seconds.

#### 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. Repeat with the other two cut pieces of Dura-Lar, testing each one in between to make sure the forms will be able to "nest" together.
5. Paint the back surface with transparent glass paint, so the front side stays smooth and glossy. Leaving some areas thick and some areas thin will look more like glass and will look more translucent as the pieces are stacked. Blend colors while still wet.

#### NOTE:

Do not heat set the colors. They will dry hard. [Krylon Clear Gloss Lo-Odor spray](#) (23710-1001) may be applied if extra durability is required.

6. Once the paint is dry, carefully define the shape by running a Sharpie marker along the edge of the piece.



## National Standards

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

- 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 #2** — Using knowledge of structures and functions

- 5-8** Students generalize about the effects of visual structures and functions and reflect upon these effects in their own work.
- 9-12** Students create artworks that use organizational principles and functions to solve specific visual arts problems.

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

- 5-8** Students analyze contemporary and historic meaning in specific artworks through cultural and aesthetic inquiry.
- 9-12** Students identify intentions of those creating artworks, explore the implications of various purposes and justify their analysis of purposes in particular work