

## Ancient Bas-Relief Casting

Create an ancient “carving” using cast paper!

### (art + history)

Bas-relief is a very ancient art in which a flat surface is carved or etched away to create a picture or scene. This art form is also referred to as “low relief,” meaning that the objects do not project very far from the background. Some historians believe that bas-relief pre-dated sculpture done in the round. Artists have used many mediums — including stone, clay, wood, marble, and bronze — to create this form of sculpture. This carving technique has been used in many cultures from Mesoamerica to India. Some of the earliest examples of the style appeared in the Babylonian, Assyrian, and Hittite cultures. Of course, examples of beautiful and very detailed bas-reliefs from later periods, when the Greeks and Romans made use of the technique, can be seen in museums around the world.

In this project, a bas-relief will be made not with hard materials such as stone or bronze, but with paper! After carving into a soft balsa foam, paper linters are cast into the mold. A coat of metallic paint results in a finished product to rival those of the ancients!

**GRADES 5-12** Note: instructions and materials are based upon a class size of 24 students. Adjust as needed.



### Preparation

1. Study images of ancient bas-relief sculpture.

### Process

1. Before carving into the foam, trace around the block on a piece of drawing paper. Within this traced rectangle, draw the design to be carved.
2. Place the drawing paper over the balsa foam, and lightly transfer the drawing to the foam,



### Materials

**Balsa Foam**, printing/relief class pack of 40, 4-1/2" x 6" x 1/2" (33111-0100); need one block per student

**Specialty Pulp**, 100% cotton rag white, 8-oz (12831-1025); share three bags among class

**Small Wooden Linoleum Cutter**, handle with six cutters (40207-1069); share five sets among class

**Small Wooden Linoleum Cutter**, handle only (40207-1001); need one per student

**Sargent® Metallic Acrylics**, 8-oz, (00730-); share two bottles among class

**Oval Poly Sponges**, 5" x 3" x 2", (32902-1000); share five among class

**Blick® White Sulphite Drawing Paper**, 500 sheets, 9" x 12", 50-lb (10209-1013); share among class

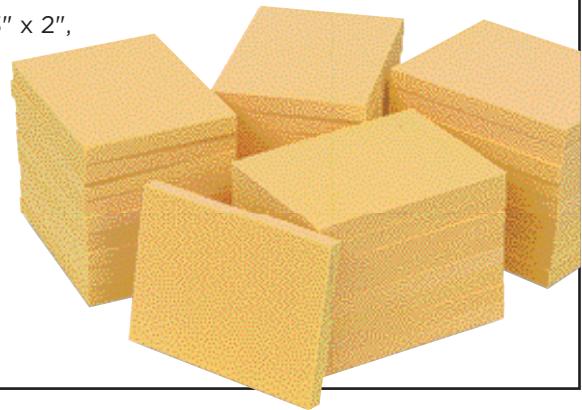
**Dixon® Ticonderoga® Pencils**, box of 12 (20305-2009); need one pencil per student

**Blick® Economy Camel Brush**, cannister set of 120 rounds (06220-1120); need one per student

**Crescent® Regular Surface Matboard**, Raven Black, 20" x 32" (13007-2453); share three among class

**Elmer's® Glue-All®**, 7.63-oz (23887-1007); share four among class

Blender



## Process, continued

going over the drawing with a pencil (using light pressure). The lines should be seen on the foam, and can be used as a guide for the carving step.

NOTE: Carving needs to be done in reverse: what is carved away from the balsa foam will actually appear raised in the final casting. The design will be opposite, like a mirror image.

3. Using linoleum cutters, carve down into the foam to create a shallow relief. Since balsa foam is very soft, various tools can also be used to compress the foam, in addition to the carving. Save scraps of foam to experiment with different types of techniques. Try pushing a pencil eraser into the foam, or make lines with a pencil.
4. When the carving is complete, briefly rinse the foam under running water to remove any dust that remains.
5. For paper casting, blend 1 cup of 100% White Cotton Rag Pulp with 3 cups of water in a blender for 1-2 minutes. Pour the pulp into a bowl, and gently pour off any water.
6. Press the pulp into the balsa foam mold, distributing it to the edges. Add enough pulp so that the finished casting will be about 1/4" thick (make as many batches of pulp as needed). Press as much water from the pulp as possible, using a sponge to help draw the water out. Let dry completely, preferably overnight.
7. When the casting is dry, paint it with bronze acrylic paint or another metallic color, to mimic the look of cast metal.
8. Showcase the bas-relief sculpture by gluing it to a piece of black matboard.

## National Standards for Visual Arts Education

**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 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 #4** — Understanding the visual arts in relation to history and cultures

- 5-8** Students describe and place a variety of art objects in historical and cultural contexts.  
**9-12** Students describe the function and explore the meaning of specific art objects within varied cultures, times, and places.



**Step 1:** Using a linoleum cutter and other tools, carve a shallow relief design into the balsa foam.



**Step 2:** Press the paper pulp into the balsa foam mold to a depth of approximately 1/4" thick.



**Step 3:** When the paper casting is dry, brush on metallic paint to mimic the look of cast metal.