

Metal Tooling with Colored Pencils

(art + social studies)

Metal tooling is a centuries-old art in which a soft metal is worked with a rounded tool on the back side in order to create a raised design on the front. Mexican and South American artists call this art form *repajado*, and it is also referred to as *repoussé* or *embossing*. A close look at some examples from various cultures reveals classic examples of repetitive pattern and rhythmic line incorporated into a design.

This classroom-friendly tooling project uses ArtEmboss — a soft and flexible metal that is easily manipulated without applying heavy pressure. It cuts easily with student-quality scissors and doesn't form dangerously sharp edges the way that regular tooling foil does. The matte-black surface coats both sides and it won't chip or flake off during embossing. The best feature of ArtEmboss is that it readily accepts drawing media, such as colored pencil, so that students can emboss and draw at the same time.

Grade Levels K-8

Objectives

- Students will learn to employ a basic metalworking technique by embossing lines and textures into a soft metal
- Students will apply design elements including line, pattern, texture, and color while considering their relationship to a 3-dimensional surface
- Students will look for and recognize examples of embossed metals in historical and contemporary examples

Historical and Cultural Relativity

- Refer to historical examples of plates, jewelry, masks, armor, shields, swords, picture frames, etc. Look for examples or imitations of repoussé in use today. If you are linking cultural studies, look for examples from Mexico and South America, Celtic nations, and ancient Mediterranean cultures in particular

Preparation

1. The ArtEmboss cannot be reworked once it has been tooled, so it's beneficial to have students create preliminary drawings with the pencils on regular drawing paper.
2. Students need to keep a magazine or 1/4" stack of newspapers beneath the metal as they work it. Embossing directly on a tabletop will not provide enough cushion to create dimension. ArtEmboss will tear if over-manipulated, so encourage students to draw firmly, but not to poke sharply through the material. You may wish to have small scraps of the material available so that students can test their pressure.

Process

1. Center matboard on the piece of ArtEmboss and trace around it with a pencil. This will define edges that will wrap onto the matboard once the embossing is complete. Keep the drawing within the lines.
2. Emboss design from the back, using a soft pencil. Blick Colored Pencils work well because they have a soft core that creates very little drag on the metal. Encourage line, pattern and texture rather than image. Use the following process or similar method:

Early Elementary - Students draw 3 or more lines that move from one edge of the defined drawing space to another edge. Choose lines that describe motion rather than straight lines. The three lines may intersect.

Turn the drawing over. With colored pencils, first draw a line next to, but not on top of the embossed lines. This will push the metal down around each line to further raise the embossing and define the line. Next, fill the spaces between the lines with color. Metallic colored pencils are especially dramatic. Do not press hard and concentrate on filling one space at a time. The coloring will naturally create an embossing as the color pushes down the soft metal and the black lines remain raised.

Middle - Students follow instructions for Early Elementary, but fill the spaces between the lines with patterns and textures rather than just color. Simplify by using just silver and gold metallic pencils.

Remind students to emboss from the back side as well as the front, leaving some of the areas functioning as negative space.

3. Once drawing is complete, center the drawing edges back over the matboard and wrap the foil around it as a support. Finished pieces can be displayed as is or mounted to another piece of matboard.



Early Elementary - Line Study



Middle School and up - study in Texture, Line and Pattern



Materials

[ArtEmboss Matte Black](#), 9-1/4" x 12", pkg of 12 sheets (60518-2050). Cut 4 pieces per sheet, size 4-5/8" x 6" to make 48 pieces per package

[Blick Studio Colored Pencils](#), gold (22063-9011) and silver (22063-9331), one each per student

[Faber-Castell Red-Line Metallic Pencils](#) (20552-1012), share set among four students

[Black Matboard with black core](#), 32" x 40" (13007-2467), cut into 4" x 5" pieces to make 64 pieces per board

[Blick White Sulphite Drawing Paper](#), (10209-1015) for preliminary drawings. Cut to 4" x 5" pieces.

[Fiskars® School Scissors](#) (57011-1005)

Magazines and newspapers, to provide a soft working surface

National Standards

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

K-4

Students know the differences between materials, 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

Content Standard #2 — Using knowledge of structures and functions.

K-4

Students know the differences among visual characteristics and purposes of art in order to convey ideas

5-8

Students generalize about the effects of visual structures and functions and reflect upon these effects in their own work

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

K-4

Students identify specific works of art as belonging to particular cultures, times and places

5-8

Students know and compare the characteristics of artworks in various eras and cultures