

Casting Coins (art + history, art + social studies)

Since coins were first used in the 7th century in what is now modern day Turkey, their purpose reaches beyond monetary value. Coins have been an artistic expression of a nation's values, they have recorded important events, paid tribute to various leaders and served as a means for advertisement.

This lesson plan allows students to design and “mint” coins bearing their own symbols. It's a simple carving and casting process using Blick Wonder-Cut® linoleum and modeling clay that dries rock-hard. Coins can be one or 2-sided, and degree of detail can be adjusted according to age level. Finished pieces can be inked and printed on paper as well.

Grade Levels 5-8

Note: instructions and materials based on a class of 25 students. Adjust as needed.

Objectives

- Students will observe the artistic expression used in coins of the past and today
- Students will evaluate the symbolism used in designing coins and select images that express their own ideas



Wonder-Cut mold



unfinished cast coin



“antique” gold cast coin (see step 7)



copper painted cast coin

Materials

Blick Wonder-Cut® Linoleum, 3" x 4" pieces (40417-1011), need two per student. For greater economy purchase larger sheets or rolls of Wonder-Cut® and cut to smaller sizes

Speedball® Linoleum Cutters, sizes Small V (40203-1202), Large V (40203-1402) and Small U (40203-1302), need one handle per student, share one each size blade between two students

Sanford® Design® Ebony Pencil (20411-2009), box of 12, need one pencil per student

Crayola® Air Dry Clay (33272-1125), share one 2-1/2-lb bucket across classroom

Chroma® Molten Metals Acrylics, (00688-1049), share one 4-color set across classroom

Blick Scholastic Golden Taklon Flat Wash Brush, 1/4" (05859-4014), need one per student

Snippy Scissors (57040-2005), need one per student

School Pencil Compass (55491-1055), need one per student

Blick White Sulphite Drawing Paper (10209-1003), package of 100 sheets, need 1/2 sheet per student

Optional Materials

Blickrylic Student Acrylics, Raw Umber (00711-8076), Pint

V-grooved Inking Plate, (42906-1003), for safer linoleum cutting

Objectives, continued

- Students will carve and cast a simple bas-relief sculpture, understand how negative space creates positive relief in the process of casting

Historical/Cultural Relativity

- Observe examples of coins from ancient and modern-day cultures. Ancient Greek, Roman and Byzantine coins are the most widely collected. Asian coins are great examples of coins as a means of artistic expression.

Preparation

1. If using larger pieces of linoleum, cut down with a packing knife. Pieces need only be 3" x 3".
2. Cut drawing paper down to half-sheets.

Process

1. Use drawing paper to design coin layout first. Use compass to create a circle 2-3/4" in diameter, then another circle inside that one 2-1/2" in diameter. Keep the drawing within the second circle, so that 1/8" border around the edge remains. Layout should be simple, especially with younger ages. Multiple relief layers (such as we see in portraits) are difficult. Have students concentrate on line and shape.
IMPORTANT: All lettering, including numbers, must be done in reverse.
2. Transfer design by drawing directly onto Wonder-Cut® block. Use Ebony or black pencil so that lines are clearly visible. Use compass again to form circles.
3. It is important to understand that the areas that will be cut away will be the areas that stand out on the finished coin. Cutters should always point away from the student and fingers kept out of the way to avoid cuts. It is recommended that a V-grooved plate be used to hold block absolutely steady, see (A).



Linoleum Cutting Hints

- Begin with outer edge of the coin, cut a groove between the outer circle and the inner circle to form edge, work towards center.
- Use the small V-groove to create letters.

Linoleum Cutting Hints, continued

- Vary the depths of cuts to create multiple layers of relief.
 - For large cut-away areas, create an outline with the small V-groove, then use larger cutter to remove the rest.
 - Keep some areas at surface level (don't cut away), these areas will appear flat.
4. Use a stiff bristle brush over all cuts to clear crumbles and dust away. Rinsing the Wonder-Cut® block under running tap water is also helpful. If coin is to be 2-sided, repeat the above steps for the back side. Make certain that the circle is drawn on the Wonder-Cut® block in the exact location as the front side, so it will line up.
 5. Use fingers to flatten 1-1/2" ball of air dry clay into a circle that covers the coin area. Press into mold. If 2-sided, line up back side of coin and press. If one sided, turn mold with clay in it over and press against table to form a flat back.
 6. Pull clay gently away from Wonder-Cut® mold by loosening all 4 sides, then lifting. If dissatisfied with results, roll clay up and try again. Trim away any excess clay on edges with scissors and allow to dry for 24 hours. It is helpful to turn the coin over once during drying to allow air to reach the back side. Rough areas may be worked off with fine sandpaper, if desired.
 7. Paint coin gold, silver, bronze or copper color. For an antique look, paint coin with a coat of Raw Umber first, allow to dry. Brush bronze or antique gold paint loosely over the raised areas of the coin, allowing recessed areas to remain dark, (see gold coin example above).



Options

- Instead of coins, create medals. Add hanging hole into design, see example at top of page.

National Standards:

Content Standard #2 — Using knowledge of structures and functions

- **5-8** Students select and use the qualities of structures and functions of art to improve communication of their ideas.

- **9-12** Students create artworks that use organizational principles and functions to solve specific visual arts problems.

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

- **5-8** Students use subjects, themes and symbols that demonstrate knowledge of contexts, values, and aesthetics that communicate intended meaning in artworks.

- **9-12** Students evaluate and defend the validity of sources for content and the manner in which subject matter, symbols and images are used in the students' works and in significant works by others.

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

- **5-8** Students know and compare the characteristics of artworks in various eras and cultures.

- **9-12** Students describe the function and explore the meaning of specific art objects within varied cultures, times and places.