

## Printmaking Lesson: Positive and Negative Prints

This lesson is intended for K-4th grade but may be adapted for other age groups by using more advanced materials like linoleum or wood or using different inking techniques like rainbow rolling. This activity was developed for use with the following Museums by Mail program but could also be used as a general lesson in printmaking:

- *19th Century Maine* (MbM 1)
  - *Black on White* (MbM 12)
  - *Woodcuts by Carroll Thayer Berry* (MbM 18)
  - *Tree Silhouettes by Daniel Farber* (MbM 26)
- 

As a class look at and discuss the Museums by Mail artwork or a variety of other black and white prints. Explain the printmaking process to the class (*Printmaking Basics* is included for reference) noting that when artists remove parts of a plate or block they are creating a positive image that the ink will adhere to. When artists impress a plate they are creating a negative image that will resist the ink. This is certainly a difficult concept to convey, but this activity will help to clarify the difference between the two.

### Maine Learning Results: English Language Standards

**E. Listening and Speaking:** Students listen to comprehend and speak to communicate effectively.

#### **E1 Listening**

##### Pre-K-2

Students use early active listening skills.

- Ask relevant questions at appropriate times.
- Converse without interrupting.
- Follow one-step and two-step oral instructions.

##### 3-5

Students apply active listening skills.

- Ask clarifying questions.
- Attend and respond appropriately to classmates and adults.
- Follow multi-step oral instructions.

**E2 Speaking** (this will depend on the amount of interactive dialogue when looking at exhibit)

##### Pre-K-2

Students use speaking skills to communicate.

- Make clear requests at appropriate times.
- Make simple presentations using eye contact.
- Use voice level appropriate to the situation.
- Share stories and information and support opinions using oral and visual examples.

##### 3-5

Students use active speaking skills to communicate effectively in a variety of contexts.

- Explain ideas clearly and respond to questions with appropriate information.
- Speak using eye contact, clear enunciation, clear gestures for emphasis, and appropriate volume and rate.
- Share information summarized from reading, listening, or viewing and form a position on a topic, supporting the position with a variety of print and non-print sources.

## **Maine Learning Results: Visual Arts Standards**

**A. Disciplinary Literacy - Visual Arts: Students show literacy in the art discipline by understanding and demonstrating concepts, skills, terminology, and processes.**

### **A1 Artist's Purpose**

#### Pre-K-2

Students recognize a variety of purposes for making art, including telling a story, communicating emotion, or beautifying functional objects.

#### 3-5

Students explain purposes for making art in different times and places, and the relationship to cultural traditions, personal expression, and communication of beliefs.

### **A2 Elements of Art and Principles of Design**

#### Pre-K-2

Students identify features of composition.

- a. Identify Elements of Art: color, form, line, shape, space, texture, and value.
- b. Identify Principles of Design including pattern and balance.

#### 3-5

Students describe features of composition.

- a. Describe Elements of Art: color, form, line, shape, space, texture, and value.
- b. Describe Principles of Design including balance, contrast, emphasis, movement, and pattern.

**B. Creation, Performance, and Expression - Visual Arts: Students create, express, and communicate through the art discipline.**

### **B1 Media Skills**

#### Pre-K-2

Students use basic media, tools and techniques to create original art works.

#### 3-5

Students use a variety of media, tools, techniques, and processes to create original art works.

### **B2 Composition Skills**

#### Pre-K-2

Students use Elements Of Art and Principles Of Design to create original art works.

#### 3-5

Students use Elements of Art and Principles of Design to create original art works including paintings, three-dimensional objects, drawings from imagination and real life, and a variety of other media and visual art forms.

### **B3 Making Meaning**

#### Pre-K-2

Students create art works that communicate ideas and feelings and demonstrate skill in the use of media, tools, and techniques.

#### 3-5

Students create art works that communicate ideas, feelings, and meanings and demonstrate skill in the use of media, tools, techniques, and processes.

## **D1 Aesthetics and Criticism**

### Pre-K-2

Students observe, listen to, describe and ask questions about art forms.

- a. Describe the art form by applying grade span appropriate arts concepts, terminology, skills, and processes as referenced in Standard A: Disciplinary Literacy.
- b. Ask questions about the art form to further understand how the artist created/performed the work of art.
- c. Recognize a variety of purposes for making/performing art works, including telling a story and communicating emotions and ideas.

### 3-5

Students describe and compare art forms.

- a. Describe and compare art forms by applying grade span appropriate arts concepts, terminology, skills, and processes as referenced in Standard A: Disciplinary Literacy.
- b. Ask questions about an art form to further understand the concepts, skills, and processes used to create/perform the work of art.
- c. Explain purposes for making art in different times and places, including cultural traditions, personal expression, and communication of beliefs.

## Positive and Negative Prints

Students will learn how to use styrofoam in two ways to make prints. This will help them to understand the difference between subtractive and additive printmaking.

Materials Needed:

- Black paint or block printing ink (available at art stores or through catalogs).
- Styrofoam meat trays or sheets of styrofoam (available at art stores or through catalogs)
- Scissors.
- Pencils.
- Paper (at least an inch larger than styrofoam).
- Cardboard/matt board pieces for each student that are larger than foam sheets.
- Glue.
- Small paintbrushes or sticks for applying glue.
- Soft rubber brayers (printing rollers that can be found at art supply stores). You can substitute small paint rollers or even paint brushes if rollers aren't readily available.
- An old cookie tray or a piece of plexiglass to roll the ink out on.
- Smocks or old t-shirts.
- Newspaper or plastic to cover inking table.

### Negative Print

#### Step One

Give students a sheet of styrofoam that is about 5x8" in size. Instruct them to draw a tree on the foam, filling the sheet. You may wish to show them an example first, discussing the way branches look. They should create the outline and then add texture to the bark with lines or cross-hatches.

#### Step Two

Set-up an inking station with brayers, trays (pre-loaded with ink), and paper. Have students put on smocks and bring their styrofoam drawing to the table. Demonstrate how to load the brayer with ink (back and forth covering the surface), and then how to ink the foam (gently covering the surface, being sure not to push into fine lines). Center paper over foam and rub lightly. Peel off paper to reveal print. Students should make five prints this way, labeling each with edition numbers (first one is 1/5, second is 2/5, etc.). Note: If using paint be sure it is thick and sticky. If it is too watery add flour or glue. Apply carefully with a small foam paint roller.



**Styrofoam tree drawing.**



**Final print.**

## Positive Print

### Step One

Give students a sheet of styrofoam that is about 5x8" in size. Instruct them to draw a tree on the foam, filling the sheet. It is very important that they draw very lightly, unlike the negative print. Do not add bark detail at this time.

### Step Two

Students will now cut-out their trees, and glue them to the center of a piece of cardboard. Once the glue is dry they can then add bark detail pressing down as they did with the negative print.

### Step Three

Again, have students put on smocks and bring their styrofoam/board to the table. Use the same technique to ink the surface, being careful to avoid the backing board. Center paper over foam/board and rub lightly. Peel off paper to reveal print. Students should make five prints this way, labeling each with edition numbers (first one is 1/5, second is 2/5, etc.). Note: If using paint be sure it is thick and sticky. If it is too watery add flour or glue. Apply carefully with a small foam paint roller.

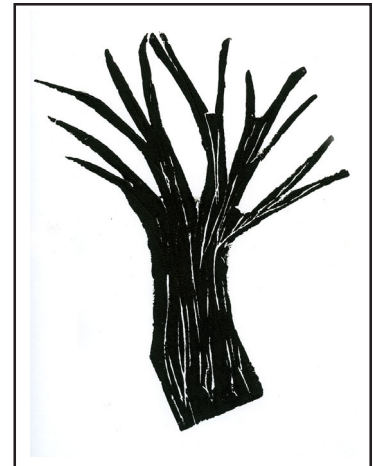
Mount each print on colored paper to display. Students can leave one of each version in class and trade the others with classmates if they'd like.



**Styrofoam tree attached to board.**



**Styrofoam tree attached to board.**



**Final print.**

### Alternatives for Negative Print:

- Have students draw and "color-in" a moon by their tree for a final night print.
- Students can rub off some of the ink around the tree and paint on colors for a sunset, or dusky blue effect. They must work fairly quickly so the black ink will not dry.
- Add lines of colored paint/ink to tray and gently roll brayer over lines (going with lines, not against). This will load brayer with multiple colors for "rainbow rolling." Apply to styrofoam in the same manner as above.

### Alternatives for Positive Print:

- Make a classroom forest by printing each student's foam/board tree on a long roll/sheet of paper. Overlap prints slightly to create depth. Students can later fill in the background with watercolor, add detail like leaves, grass, snow, or animals, with paint or paper.
- Individually, students can repeat their print on a single sheet of 12x18" paper to create their own forest.
- Students can paint a background first before printing, using watercolor wash skies, or a whole scene created while leaving an appropriate sized space for their tree (a good opportunity to discuss the techniques used for showing depth.)

## Printmaking Basics

Essentially printmaking occurs when a matrix, worked by an artist and then inked, is printed. That matrix can be made of paper, metal, stone, screens, linoleum, etc. The artist either impresses, carves, or draws on the surface of the matrix. These plates are then inked and hand-rubbed onto paper or sent through a printing press. When prints are made from a plate, it is called “pulling,” and the number of prints pulled from a plate is called an “edition.” The edition number usually appears on the bottom left as a fraction (e.g., 23/50). The first set of prints made are usually for the artist and are called “artist proofs” and often labeled “AP.” The four primary types of print techniques are **relief, intaglio, planographic, and screenprint**.

---

### **Relief**

A category of printmaking in which a design on a flat surface is carved with a knife, chisel, or other tool, removing the areas that the printmaker does not want to be printed. These plates are then inked and paper is pressed to the surface by hand, with a wooden tool, or by a press. The resulting impression is a mirror image of the original plate and will only show the lines and shapes of the design left on the *unworked surface*. The most common types of relief prints are **woodcut, wood engraving, and linocut**.

### **Intaglio**

(from the Italian word *Intagliare*, to carve or incise) A category of printmaking in which the surface of a printing plate has been incised with a design by one or more techniques. In order to print the image, ink is applied and wiped across the surface of the plate, filling the recessed areas. Usually the excess ink is then cleaned off the unworked surface of the plate. When printed under great pressure, the paper is forced into those incised marks, thus picking up the ink and often creating ridges and raised areas in the final printed impression. Types of intaglio prints are **engraving, etching, aquatint, and mezzotint**.

### **Planographic**

Planographic processes include lithography and some forms of commercial printing. The lithographer creates a design directly on a stone or smooth plate with a greasy material, such as crayon, and chemically fixes it to the surface. The stone is dampened with water, which, repelled by the greasy medium, only settles in the blank spaces where there is no design. Thus the printing ink adheres only to the areas where the design was drawn. It is considered the most draftsmanlike of printmaking processes for its ability to preserve the artist’s gestures so accurately.

### **Screenprint**

A printing process using stencils to block out areas which are then printed through silk, other fabric or metal mesh (screen). Several different screens may be used to print an image in several colors. Also called Silkscreen or Serigraph.

For more information on printmaking, please see the *Glossary of Printmaking Terms*.