This lesson resource focuses on simple elements of design and composition and encourages uses of a variety of drawing techniques in the production of a one-color lithograph print. Materials suggested for use are simple and commercially available. The lesson incorporates a brief historic overview of the printmaking art. The prints of famous artists are to be used as inspiration and motivation for personal expression. This plan includes: lesson goals and objectives; background preparation; a glossary of terms; a list of supplies; optional supplies; and instructions for implementation of two lessons. Additional suggestions provide technical and cleanup tips. Follow-up ideas are given for lesson extension. (MM)
Lesson #3
Spoon Printing Lithography
A Printmaking Experience for Elementary Students

Elementary students can learn the lithographic printmaking process safely and easily without using printing presses or dangerous tools and chemicals. With Litho-Sketch®, a system of paper plate lithography that is safe for children to use, and a wooden spoon, elementary art teachers are able to offer even their youngest students the opportunity to explore an important, sophisticated art technique that is normally never available to this age group. This simple, easy-to-teach lesson combines important background art history and appreciation material and basic elements of design and composition with an exciting, engaging hands-on art experience. In addition, the lesson can be taught successfully in two 50-minute classes with results that will make both teacher and students proud.
Lesson goals and objectives:

1. Students will create one-color (black) lithographic prints of a design or drawing of their choice.
2. The lesson will incorporate art history, aesthetics, criticism, and personal expression.
3. The lesson will focus on simple elements of design and composition and will teach a variety of drawing techniques.

Background and Preparation:

1. Teacher should present a very brief, simplified historical overview of printmaking in general, and lithography in particular. Explain to students that lithography is a type of art that was first discovered in the late 1700's when it was found that stone tablets treated with special chemicals could be used to print images on paper. Many artists and printers worked on developing this process, improving it over the next hundred years. One of the most famous lithographers was Toulouse Lautrec who created very exciting, colorful posters in the late 1800's. Paper plate lithography was first developed in the late 1930's, and through advanced technology, has progressed to the quality available today.

2. Show students as many examples of prints and printmaking techniques by famous artists as available — Toulouse Lautrec, Dürer, Escher, and Munch, among others. Show examples of prints by Oriental masters and, if possible, show original prints created by local artists. Discuss how prints are different from other types of art, such as painting, sculpture, and photography. Ask students to share their ideas about what they like and don't like about the prints they see and how some of the prints make them feel.

3. Prepare examples of each stage of the Litho-Sketch* process to share with students. These examples will help students to understand the process. Also, create several final prints in the exact size students will be using as additional examples. Before students begin work, demonstrate the steps from beginning to end. This will also help make the total process more understandable for young students.

4. Explain to students that the printed image will be the reverse or mirror image of what is drawn — what is drawn on the right will appear on the left, that numbers and letters will be backwards. If students want numbers or letters in their drawings they must draw them in reverse for them to print correctly. For young students this concept is both difficult to understand and to execute, and it is often wise to discourage their using numbers or letters in their drawings.

Glossary:

- **Brayer** - a roller used to apply printing ink to the master.
- **Contrast** - the putting together of different elements in a work of art, such as light and dark, positive and negative space, etc.
- **Cross hatching** - creating tonal or shading effects by applying closely spaced parallel lines drawn in one direction and then drawing another group of lines that cross the first at an angle.
- **Distortion** - the alteration or blurring of the natural shape, form, or surface.
- **Lithography** - the art of printing from a flat stone or metal plate. The design which is to be printed is put on the surface with a medium to which ink will adhere and the blank areas are treated with a medium that repels the ink.
- **Master** - the term for the paper plate on which the original design is drawn.
- **Negative space** - unoccupied or empty spaces in a drawing or composition.
- **Plate** - the treated lithographic surface on which the original design is drawn (metal plate or paper plate).
- **Plate solution** - a special product used with paper plate lithography that allows the printing ink to adhere to the drawing and repels ink from the rest of the plate.
- **Positive space** - definite forms and shapes in a drawing or composition.
- **Printing ink** - special inks used for making prints.
- **Printmaking** - the art of making prints; an art form that uses a graphic medium (etching, engraving, lithography, woodcutting, silk screening, block printing, etc.).
- **Shade** - to darken certain areas of a picture to show shadows or the absence of light.
Supplies:

Litho-Sketch Products:
- Paper Masters:
  - 4" x 6" (Catalog #12307G)
  - 11" x 14" (Catalog #12304D)
  - 15" x 20" (Catalog #12305E)
  - 22" x 30" (Catalog #12316S)
  - 25" x 36" (Catalog #12306F)
- Plate Solution (Catalog #12308H)
- Inks — black (Catalog #12328G)
- Reproducing crayons (Catalog #12338T)
- Rubber Brayer (Catalog #12331K)
- 6" Polyetherene Brayer (Catalog #12330J)
- Cotton Pads (Catalog #12302B)
- Flat bowl wooden spoons (Catalog #12339V)
- Inking slab - glazed ceramic tile (Catalog #113395)
- Mineral spirits (Catalog #63539N)
- Black Sharpie markers
- Pencils
- Rulers
- Newspaper
- Plain paper to use for practice drawings
- Printing paper

Optional Supplies:

- Gum Solution (Catalog #12310K)
- Hand Soap (Catalog #12315R)
- Brush Flush* (a new non-toxic cleaner for oil-based inks, Catalog #12343A)

Instructions:

First Lesson

1. Have the Litho-Sketch Masters® and the practice and printing papers cut to the exact same size. Although masters are available in a variety of large sizes, cutting them to a smaller size is easier for the children to work with and more economical for the teacher.

2. After providing background information and giving the students a demonstration, have students, using a ruler, draw a one inch frame or border on the practice paper. If the size you are using is 6" by 8", this border reduces the drawing space to 5" by 7". This border provides handling space when working on the paper master and prevents running the brayer to close to the edge when printing, thus getting ink on the work space.

3. Talk to students about contrast and positive and negative space in a drawing and explain their importance in a black and white print. Show how to use shading and cross hatching effectively. Emphasize the concept that the drawn image will appear in reverse on the finished print. Urge students to keep their drawings simple, but that they should fill up the entire drawing space.

Second Lesson

4. Be sure students have created a design or drawing with which they are satisfied. Give them Litho-Sketch Masters®. Again instruct them to draw the one inch border in pencil and reminded never to put their fingers or hands on the master. The oils and dirt on fingers will mark the master and appear on final prints.

5. To hold the master while drawing and to protect it, the students should place a clean scrap paper between their fingers and the master.

6. Instruct the students to transfer their pencil drawings lightly to the master. If the pencil drawing is done lightly on the master, it will not affect the print.

7. Using black fine point or ultra fine point Sharpie Permanent Markers or black crayons, the students should go over their drawings on the master, working on shading and coloring in areas in black.

8. Set up a printing station where the students can bring their masters when their drawings are complete. Depending on the age of the students, the time allotted, and the judgment of the teacher, either the students themselves or the teacher can perform steps #8 and #9. The masters are desensitized with Litho-Sketch® Plate Solution. The plate solution bonds the drawing to the master and allows ink to adhere only to the drawing part of the plate. This solution must be applied before each inking with a cotton wipe.

9. Black ink is rolled onto the brayer. A plain white glazed tile makes a perfect inking slab. The black ink is applied with the brayer to the master.

10. Without touching the ink, the students take their inked masters back to a newspaper covered table. A piece of plain, smooth white paper is placed over the inked master. Using the flat bowl of a wooden spoon, the students should carefully rub over the paper. They need to apply pressure, and they need to go over the image many times to effect the transfer. Remind students that they must not move or remove the paper from the master if they wish to avoid blurring and distortion.

11. Many first prints will be outstanding, but quality will improve with subsequent inkings and prints.
Additional Suggestions:

1. To prevent the blurring or distortion of the printed image, instruct students to hold the paper on the master very securely and to not let the printing paper move or slip. If students want to check to see if the image is printing clearly, show them how to hold paper tightly against the master and to lift carefully one corner to check printing progress. Urge students not to check too often or too soon, as this invites slippage and consequent blurring.

2. Excessive plate solution on the master can be transferred to the printing paper causing a slight yellowing. Allow the plate solution to evaporate after inking the master and before printing.

3. If you wish to save the master (for future printing, print the ink off the master by using scrap paper and rubbing it with the spoon. Do this several times until no ink appears on the scrap paper. Then apply a coat of gum solution with a cotton pad or sponge to the entire plate. The gum solution will allow the plate to be stored and will come off when the master is desensitized with plate solution.

4. To prevent smearing of the final prints, be sure to put prints in a clean, safe place to dry. Because Litho-Sketch ink is AP Non-Toxic, it does not contain the ingredients that promote speedy drying. The prints will dry slowly in approximately two to three days.

5. The number of prints from a Litho-Sketch Master will vary depending on the detail in the drawing and the drawing materials used. Approximately 10 to 20 prints can be expected from each master.

6. Clean up can be fast and easy. Much of the ink on the brayer can be removed by rolling it on newspaper. The remainder can be removed with a special hand soap or a new nan-toxic cleaner called Brush Flush. Both will safely remove ink from the brayer, the inking slab, and hands. Mineral spirits on cotton pads can also be used. Throw away all cotton pads and newspaper when finished.

7. Prints that are completely dry can be colored with color pencils, crayons, or water colors, if desired.

Follow-up Ideas:

These prints will certainly attract attention. Display them in the art room, in showcases, and on walls around the school. Prints can be matted and framed and used as holiday or Mother's Day gifts. Holiday or note cards can also be made. Drawings can be printed on one half of good quality, heavier weight paper that is twice the size of the master. The paper can then be folded in half to create the card. If each child draws a scene from around the school, one card from each student in the class can be put together to make a collection of note cards as a gift to the principal or classroom teacher. For more information on paper plate lithography and additional ideas for using Litho-Sketch, send for a completely illustrated Litho-Sketch instruction manual from American Art Clay Co., Inc., 4717 W. Sixteenth Street, Indianapolis, IN 46222.

Examples of finished prints are by art students from Mary Adams Elementary School, Indianapolis, Indiana, Joe Rohrman, Art Teacher.

This is one lesson in a series of art plans for elementary and secondary programs using American Art Clay Co. Inc. products. Successful lessons will be considered for future publication. Send your ideas and slides to David Gamble, National Marketing Director, American Art Clay Co., Inc.