

— THE HISTORIC —
**WOODSTOCK
ART COLONY**

Art in the Arthur A. Anderson Collection
at the
New York State Museum



A Lesson in Lithography & Printmaking

**For Grades
9–12**



The New York State Museum
Cultural Education Center
222 Madison Avenue
Albany, New York 12230

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Cover Photo: *Lithography Stone and Process Images*, Ronald Netsky , n.d.



ABOUT THESE LESSONS

This lesson is one of three that draw from The Historic Woodstock Art Colony: The Arthur A. Anderson Collection at the New York State Museum. This extraordinary collection represents a body of work that shaped art and culture in New York and forms a history of national and international significance. These lessons serve to aid educators in teaching students about a variety of factors related to art making, including specific methods and techniques, stylistic movements, and the context and impact of place in creativity.

The three lessons in this series include “A Lesson in Landscapes” and “A Lesson in Creating a Sense of Place,” both designed for grades K–5, and “A Lesson in Lithography & Printmaking,” which is designed for grades 9–12.

The New York State Learning Standards met in these lessons are included in each lesson. For more information on the standards visit www.nysed.gov/next-generation-learning-standards.

BACKGROUND INFORMATION FOR TEACHERS

Woodstock, New York, is home to what is considered America’s first intentionally created, year-round arts colony—founded in 1902 and still thriving over one hundred years later. The Woodstock story begins when the artists’ colony called Byrdcliffe was established in 1902, focusing on the Arts and Crafts movement. In 1906 the Art Students League of New York, one of the country’s most important and progressive art schools, moved its summer school to Woodstock, bringing some 200 students annually to the area. Today, Woodstock continues to attract artists working in a variety of media and approaches, ranging from realism to abstraction—setting Woodstock apart from other art colonies that flourished for a limited time and were centered on a single style.

ABOUT THE ARTHUR A. ANDERSON COLLECTION

Arthur Anderson collected all kinds of things—minerals, reptiles, stamps—while he was growing up in Michigan, and he developed an interest in art when he was a teenager. Later, he was especially captivated by works created by artists working in the Historic Woodstock Art Colony.

Over three decades Arthur collected about 1,500 works of art by almost 200 artists. In 2018 he donated his entire collection to the New York State Museum, where, he wrote, “it can reside in perpetuity and be best cared for, used, and appreciated” by the public. Some one hundred of these works, representing a wide range of artists, styles, and subjects, were on display in an exhibition, *The Historic Woodstock Art Colony*, at the State Museum from November 10, 2018, to December 31, 2019. All of the artworks used in this lesson are in the collection of the New York State Museum.



A LESSON IN LITHOGRAPHY & PRINTMAKING

FOR GRADES 9–12

THIS CURRICULUM IS ALIGNED WITH THE NEW YORK STATE P-12 LEARNING STANDARDS.

INTRODUCTION

Multi-talented artist (and expert mountaineer) Bolton Brown was one of the co-founders of the Byrdcliffe Arts Colony, but he left it in 1904 after clashing with fellow founder Ralph Radcliffe Whitehead. Thereafter, Brown split his time between New York City and Woodstock, teaching his own classes there in the summer.

By 1915 Brown was immersed in lithography, a printmaking process that uses a stone or metal plate and oil, water, and ink. Although the process was invented at the end of the eighteenth century in Germany and was used commercially and artistically throughout Europe and the United States in the nineteenth century, Brown is credited as the father of American lithography for his dedication to perfecting the medium scientifically and artistically. He experimented with and invented new processes, wrote widely on the subject, created more than 400 of his own original lithographs, and printed for other artists, such as George Bellows and Rockwell Kent. Brown's own work ranges in style and subject matter, exploiting the expressive possibilities of the lithographic method—from delicate, tonal landscapes to sharply delineated still lifes.

As an artist, Brown appreciated the physical labor that went into lithography. The process requires physical strength as well as a good understanding of chemistry, and Brown was often seen around Woodstock carting heavy limestone slabs from which he made his printing plates. He believed it was important to work directly on stone, saying that it was “the most perfect of surfaces,” and he would sometimes bring a stone out to a site and work directly from nature.

OBJECTIVES

This lesson encourages students to gain basic understanding of lithography and other printmaking processes. Students will use observation skills and discuss Woodstock artists, using newly introduced vocabulary. Students will study lithographs and experiment with techniques to plan designs and create their own prints. They will present and discuss their artworks and compare and evaluate the features of different works. Students will make connections between process and meaning, developing a better understanding of lithography in terms of printmaking as a fine art technique.

ABOUT THE LITHOGRAPHY PROCESS

Lithography was invented in Germany in 1796 by the actor and playwright Alois Senefelder (1771–1834). Senefelder discovered the printing technique by accident while making copies of his scripts. He developed and advanced the process, and in 1818 he wrote *A Complete Course of Lithography*.

Lithography influenced the circulation and accessibility of texts and artwork because a writer or artist could make many copies of their work using a single stone. Lithography became popular for commercial use by around 1820. By the 1880s, adding color to lithographs was more commercially viable, and the process was widely used to create illustrations and advertisements. Many artists came to appreciate the shifts of tone that could be achieved with lithography.

Limestone is the most common stone choice for lithography because it is very porous and therefore holds the various media, although the minerals zinc and aluminum are also sometimes used.

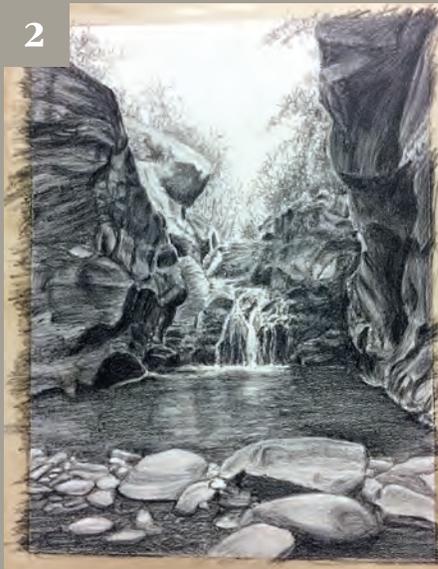
Lithography uses a chemical process to create an image. The process is based on water and oil repelling each other, a phenomenon called *immiscibility*.

THE LITHOGRAPHY PROCESS

1



2



1. The artist draws an image—in this case a landscape with a waterfall—with a lithographic pencil on a flat-surfaced stone.

2. The drawing on the stone is completed.

3



4



3. The printer coats the surface of the stone and drawing with gum arabic and nitric acid, a process that treats the non-drawn areas of the stone so that it will attract water and repel ink.

4. After the gum arabic dries, the printer washes out the crayon with a solvent.

Lithography stone and process images provided by Ronald Netsky, Professor and Director of the Studio Art Program, Nazareth College, Rochester, New York

THE LITHOGRAPHY PROCESS

5



6



5. The printer has applied asphaltum to the surface of the stone, which creates a base for printing, and then sponges the surface with water. The asphaltum base attracts the ink for printing.

6. The printer uses a leather roller to “roll up” the stone with lithographic ink. The surface of the stone must be continuously sponged with water to keep the non-drawn areas free of ink.

7



8



7. A sheet of fine cotton rag paper is placed on the stone and run through the press.

8. The inked image is transferred to the paper.



Video Instruction

Additionally, if your classroom has the capacity, show a stone-lithography demonstration video in class. Options include:

- ▶ <https://m.youtube.com/watch?v=nUXDItQfqSA>
- ▶ https://m.youtube.com/watch?v=JHw5_1Hopsc

FEATURED WORK

BOLTON BROWN (AMERICAN, 1864–1936)

Little A, 1915

Lithograph in sanguine ink

12½ x 12¾ in.



FEATURED WORK

BOLTON BROWN (AMERICAN, 1864–1936)

Storm, 1923

Lithograph

13 x 11 in.



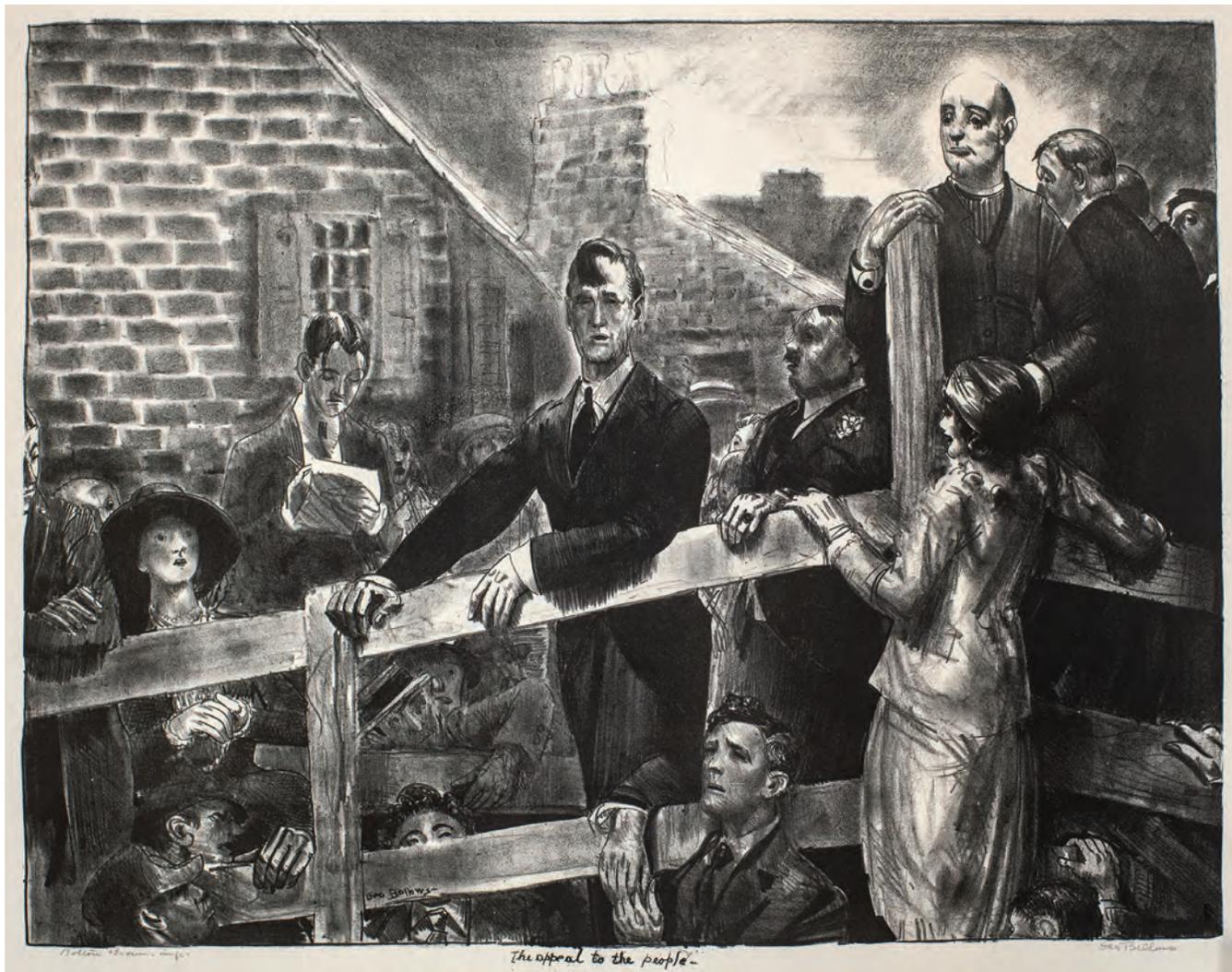
FEATURED WORK

GEORGE BELLOWS (AMERICAN, 1882–1925)

Appeal to the People, 1923

Lithograph

15 x 19 in.



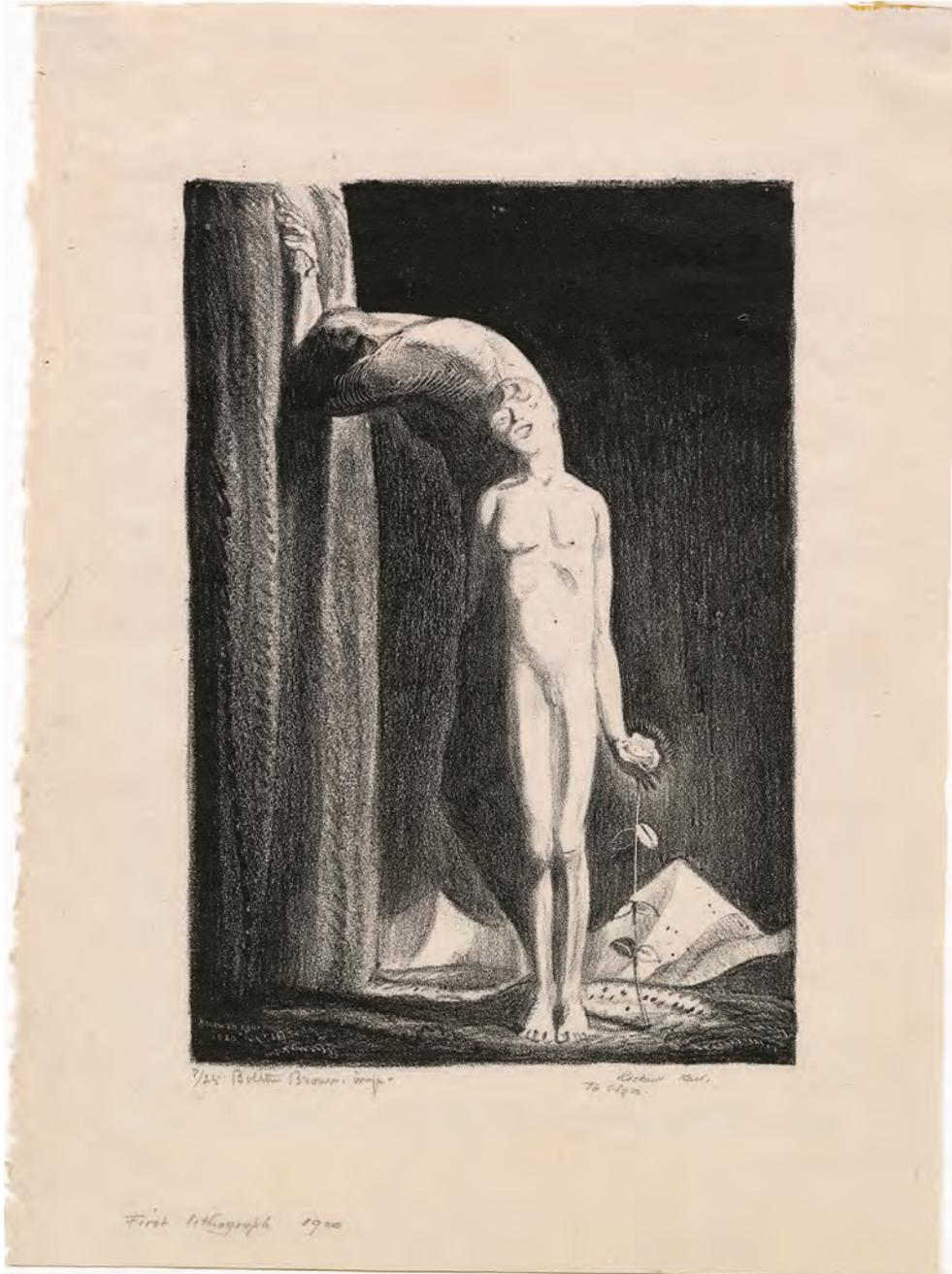
FEATURED WORK

ROCKWELL KENT (AMERICAN, 1882–1971)

Father and Son, 1920

Lithograph

6¾ x 4¾ in.



VOCABULARY

lithography – From the Greek *lithos* (stone) and *graphein* (to write), the process of printing from a flat surface on which the image to be printed is ink-receptive and the blank areas are ink-repellent.

lithographic stone – A flat limestone block ranging in size and thickness. Stones can be reused by grinding down the surface to remove the previous image.

lithographic crayon – A compressed grease crayon or pencil used for drawing on stone or metal.

edition – The number of prints pulled from one stone is called an edition. Once a certain number of prints is pulled, the surface image is ground away to create a clean slate so that more prints of the image can't be made.

gum arabic – A natural substance that attracts water to and repels ink from the non-drawn areas of the stone.

asphaltum – A natural tar-like substance that forms a printing base that attracts ink.

printing press – A machine used to print text or images from a stone or plate. The press applies pressure to an inked surface.

chiaroscuro – The treatment of light and shade in drawing or painting.

VISUAL THINKING STRATEGIES

WARM-UP

Review with your students the lithographic process outlined in the steps and videos provided.

Starting with a brainstorm activity, ask students the following questions while examining the art process:

- ▶ How does the process of lithography affect and influence an artwork?
- ▶ What are the benefits and disadvantages of lithography as a medium?

GUIDED PRACTICE

To support class discussions, have students focus on the use of line and contrasting colors that create tone and form composition in Bolton Brown's works, *Little A* and *Storm* (p. 6 & 7), and then explore the following questions:

- ▶ Do the lithographs fall within an established genre? (landscape, portrait, abstraction)
- ▶ How does the use of line create texture in each?
- ▶ How does the contrast of light and dark impact the tone of the artworks?
- ▶ How do you think the artist's creative process was different when creating drawings on lithography stones as opposed to creating a sketch on paper?
- ▶ How might the images have differed if the artist worked using a different printmaking method?

VISUAL THINKING STRATEGIES

EXPANDED DISCUSSION

Bolton Brown created many hundreds of lithographs during his career, while also printing for artists like George Bellows and Rockwell Kent (p. 8 & 9), who relied upon his skilled assistance with the complex techniques of lithography. In both Kent's and Bellows' pieces, Brown signed his name alongside the artist. Have students think about the importance of collaboration between artist and printer and answer the following questions:

- ▶ Should the printer sign the artwork? Why or why not?
- ▶ How do these works differ from Brown's direct work on stone in his own original artwork?

INDEPENDENT STUDY

For further discussion, have students respond to the "Related Artworks" section found at the end of this lesson.

ARTMAKING ACTIVITIES

Artmaking activities will be based on availability of materials in your classroom. These activities can present an opportunity to discuss with students the similarities and differences between printmaking processes. The following are some ideas to get started with the process of lithography or other printmaking methods:

LITHOGRAPHY

If you have the proper materials, have students experiment with lithographic techniques and processes to produce their own prints. Have students focus on creating a range of tone using a variety of lines.

“KITCHEN LITHOGRAPHY”

Stone lithography is just one printmaking technique. If you don't have access to lithography stones and chemicals, “kitchen lithography” is an alternative, using ink, lithographic crayons, plexiglass, and commonly found household supplies, such as vegetable oil, vinegar, soda water, aluminum foil, sandpaper, sponges, and masking tape. Many explanations and demonstrations can be found online, from which teachers can learn the process to demonstrate for students, or to present the students demonstration footage in class.

RELIEF PRINTING

Relief printing is one of the oldest and most common forms of printmaking, dating back to ancient China. It involves the basic transfer of an image to a surface. The artist carves away an image on a block that is then inked and pressed onto a surface, transferring the inked form. This method can be used with linocuts, woodcuts and stamps, and even cut vegetables, like potatoes and celery bunches. Many demonstrations are available online.



Wrap-up

Have the students reflect on their own printmaking process and again pose the question:

- ▶ How might the process of lithography, or printmaking generally, add to the meaning of the artwork?

ARTMAKING ACTIVITIES

OPTIONAL CROSS-CURRICULAR EXTENSIONS

Science Extension: Investigate properties and behaviors of acids and bases to better understand lithography. Discuss pH values. Demonstrate how oil and water repel one another, and how that is seen in the lithography process. (Science Standards: MS: PS1-8, HS:PS1-11)

ELA Extension: Lithographic prints are made in multiples. Are each still considered originals? Write a brief essay explaining why. (9-10W1)

RELATED ARTWORKS



John McClellan (American, born England, 1908–1986)
Cat and Table, 1939
 Lithograph
 9 x 6¼ in.



George Bellows (American, 1882–1925)
Hungry Dogs, 1916
 Lithographs
 13¼ x 10 in.



George Bellows (American, 1882–1925)
Eugene Speicher Drawing on a Stone,
 1921
 Lithograph on paper
 11½ x 8½ in.



Bolton Brown, (American, 1864–1936)
Choke Cherries, 1920
 Lithograph
 9 x 12¾ in.



Otto Bierhals (American, born Germany, 1879–1944)
Path in Woods, c. 1935
 Hand-colored lithograph
 7 x 9 in.



Grant Arnold (American, 1904–1988)
Old Risely [sic] Barn, 1936
 Lithograph
 10 x 14 in.



Yasuo Kuniyoshi (American, born Japan, 1889–1953)
Carnival, 1949
 Lithograph
 15½ x 9¾ in.

NEW YORK STATE LEARNING STANDARDS

Enduring Understanding

- ▶ **2.3:** People create, respond to, and interact with objects and places in ways that define, shape, enhance, and empower their lives.

Essential Questions

- ▶ **2.3:** How do objects and places shape lives and communities? How do artists and designers determine goals for designing or redesigning objects, places, or systems? How do artists and designers create works that effectively communicate ideas or influence people's lives?
- ▶ **10.1:** How does art attune people to their surroundings? How does artmaking contribute to awareness and understanding of one's life and the lives of others in the community?

Education Standards

- ▶ **VA:Cr1.1.2:** Collaboratively brainstorm multiple artmaking approaches to an art or design problem.
- ▶ **VA:Cr1.2.4:** Work individually and collaboratively to set goals and create artwork that is meaningful and has purpose to the makers.
- ▶ **VA:Cr2.3.3:** Individually or collaboratively construct representations, diagrams, or maps of places that are part of everyday life.
- ▶ **VA:Cn10.1.1:** Create works of art about events in home, school, or community life.

Interdisciplinary Connections

- ▶ Visual Arts, Science, ELA