



## MASONIC PLAQUE IN THE FORM OF A ROYAL ARCH TRACING BOARD

Artist unidentified

Probably Natick, Massachusetts; 1899

Wood with printed and painted paper; 18  $\frac{3}{4}$  × 31  $\frac{5}{8}$  × 1 $\frac{5}{16}$ "

Gift of the Hirschhorn Foundation, 1997.6.4

Photo by David Stansbury, Springfield, Massachusetts

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### BACKGROUND INFORMATION ON THE OBJECT

The Freemasons are a fraternal organization that traces its roots to Solomon's Temple; more likely, however, it arose from practices associated with medieval stonemasons' guilds. Modern Freemasonry dates back to seventeenth-century England but was established in North America around the time of the American Revolution. The members of this secret society are joined together by a system of shared ideals, morals, and beliefs. Masonic teachings are intended only for initiates into the society. To protect this knowledge, a coded language of symbols, emblems, and signs was developed. Because of this secrecy, non-Masons have often been suspicious of the Freemasons.

Much of Masonic symbolism is mathematical in nature, specifically geometric. Often, the letter G can be found on Masonic artifacts, representing the "Great Architect of the Universe" or "Grand Geometer." A star or rays of light may symbolize truth or knowledge, both tenets the Freemasons value. In *Masonic Plaque in the Form of a Royal Arch Tracing Board*, the letters on the ladder in the upper part of the central panel stand for Faith, Hope, and Charity. Most likely, this plaque was made to hang in the home of a Mason, who would know the meaning of the symbols and forms that compose the design and would understand its full meaning.

### RELATED LESSONS

- "Symmetry and Symbols" (2-3)
- "Exploring Folk Art Through Poetry" (2-3)

# SYMMETRY AND SYMBOLS

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2-3

**GRADE LEVEL: 2-3**

**NEW YORK STATE LEARNING STANDARDS: THE ARTS; ENGLISH LANGUAGE ARTS; AND MATHEMATICS, SCIENCE, AND TECHNOLOGY**  
**ESTIMATED TIME: ONE 60-MINUTE PERIOD**

## OBJECTIVES

- Students will be introduced to the idea that geometry, specifically symmetry and congruence, can be used to structure the composition of an artwork.
- Students will recognize and identify the symmetrical and congruent elements present in an object of folk art.
- Students will construct their own geometric cut-paper collages, applying the concepts of symmetry and congruence in their compositions.
- Students will be introduced to the art and symbols of the Freemason society.

## MATERIALS

- Images of *Masonic Plaque in the Form of a Royal Arch Tracing Board*
- Geometric cut-paper shapes, additional paper for collage and background, scissors, glue sticks
- Mirrors and/or index cards

## LESSON ACTIVITIES AND PROCESSES

### Introduction

- Introduce the concept of composition: the arrangement and placement of shapes, forms, colors, and other elements in a work of art.
- Tell the students that geometry and other mathematical concepts can be used as compositional tools.
- Review the concepts of symmetry and congruence.
- Share several reproductions of works of folk art—of both those that employ symmetry or congruence in their compositions, such as *Surprise Quilt Presented to Mary A. Grow* (see lesson plan “Coming Together: Creating a Community Quilt”), and those that do not, such as *Flag Gate* (see lesson plan “The Stars and Stripes”). Ask the students whether symmetry or congruence are represented in the composition of each of the objects.

### Discussion

- In pairs, the students will study reproductions of *Masonic Plaque in the Form of a Royal Arch Tracing Board*, identifying areas where symmetry or congruence are exhibited.
- The students may use small mirrors to confirm symmetry. The mirrors can be positioned on the centerlines of areas believed to be symmetrical; the students may check if the reflection of one half of an observed design matches the other half. Alternately, the

students may use index cards to block half of the areas hypothesized to be symmetrical and compare the two halves of the images, one half at a time.

- Partners should confer and double-check any areas of disagreement.
- Once it is clear that the students have grasped this concept and have been successful in determining symmetry and congruence within the work, introduce and discuss the background material on *Masonic Plaque in the Form of a Royal Arch Tracing Board*, particularly the fact that the Freemasons are a secret society and that geometric shapes and concepts are important to their system of secret symbols.
- Encourage the students to guess and imagine meanings for the unfamiliar symbols in the work.

### **Activity**

- Introduce the idea that the students will imagine that they are the founders of their own secret societies, and that each student will create a plaque to represent his or her society. Each plaque should have a secret meaning encoded in the shapes, colors, or symbols used.
- Instruct the students to design a composition with cut-paper geometric shapes, employing both symmetry and congruence in their designs.
- Remind the students that each composition as a whole may be symmetrical, or that areas within a composition may exhibit symmetry, or both.
- The students should experiment with variations of their compositions before settling on a final version and gluing the paper shapes in place. Before beginning to glue, partners should check each other's compositions, verifying that some areas are indeed symmetrical and that some shapes are in fact congruent. If there is any dispute as to the symmetry of a design, the mirrors may be used to check.
- Students may cut their own organic shapes in addition to geometric shapes if their composition calls for it.
- Assist the students as they work on their plaques, reminding them of the objectives of their designs.
- Students should share their finished works with their partners. In doing so, they should also share some of the secret meanings and symbolism in their designs.

### **PRE- AND POST-LESSON ACTIVITY SUGGESTIONS**

- Visit the American Folk Art Museum for a guided tour. Conduct this lesson before or after your museum visit.
- Continue the students' exploration of symbolism with the "Stars and Stripes" lesson, which explores the symbols present in the U.S. flag.
- Mathematical concepts, including geometry, symmetry, and congruence, may be introduced as design parameters by teaching the "Coming Together: Creating a Community Quilt" lesson in conjunction with this lesson.

## ASSESSMENT/EVALUATION METHODS

- Students expressed their understanding of symmetry and congruence by recognizing and identifying these concepts in the observation of *Masonic Plaque in the Form of a Royal Arch Tracing Board* and by applying the concepts in their own compositions.
- Students showed understanding of the concept of symbolism, both in discussion and in their own designs.

## RECOMMENDED RESOURCES

### Recommended Book for Teachers

Hollander, Stacy C., and Brooke Davis Anderson. *American Anthem: Masterworks from the American Folk Art Museum*. New York: American Folk Art Museum in association with Harry N. Abrams, 2001. An exploration of American folk art from the colonial period through the present as seen through highlights from the American Folk Art Museum's collection. *Masonic Plaque in the Form of a Royal Arch Tracing Board* is illustrated and discussed on pages 165 and 357–358.

### Recommended Website

Henry Ford Museum:

“Quilting Genius” online exhibition

[www.hfm.org/museum/quiltinggenius/home.asp](http://www.hfm.org/museum/quiltinggenius/home.asp)

Includes the rare *Quilt for a Freemason*, which employs some of the same symbols as the *Masonic Plaque in the Form of a Royal Arch Tracing Board*.