



MORSE
MUSEUM

IRIDESCENT INK STANDS



Pen and Ink Stand, c. 1910
Molded glass, blown glass, silver-plated bronze
Tiffany Studios, New York City, 1902–32 (53-006:A-C)

GRADES/LEVEL:

Kindergarten–5th grade/Elementary

TIME REQUIRED:

1 hour

LESSON OBJECTIVES:

Students will:

- learn about iridescence.
- create a finished piece of iridescent art inspired by Louis Comfort Tiffany (1848–1933).

MATERIALS:

- Black paper (card stock, construction paper, magazine pages, sandpaper, etc.)
- Cardboard box (any size)
- Brown paper grocery bag (optional)
- Construction paper (optional)
- Water-based paint (optional)
- Paper towel
- Scissors
- Clear nail polish
- Crayons, markers, or colored pencils
- Aluminum baking pan
- White glue

VOCABULARY:

Favrile: trademark Tiffany used for his glass, pottery, and metalwork (including enamel); its root is from ‘fabricate,’ and Tiffany applied Favrile to his artwork to suggest its handmade quality.

Iridescence: a colorful, natural phenomenon that occurs when there is a disruption in the way light reflects off a surface.

ACTIVITY DESCRIPTION:

Glass with an iridescent appearance is created by adding metallic minerals to the primary ingredients of glass—silica, soda or potash, and lime. Iridescence can also be achieved by spraying a glass object's surface with stannous or lead chloride before heating it in an oxygen-deprived atmosphere. Louis Comfort Tiffany (1848–1933), like many other artists of the time, was inspired to create iridescent glass thanks in part to nature. Peacock feathers, fish scales, butterfly wings, and abalone shells all feature rainbow-like colors when viewed from different angles.

Archaeology also influenced artists. Descriptions of the long-buried cities of Herculaneum and Pompeii in the 18th century, and the unveiling collections of antiquities and ancient glass, like the one donated to the Metropolitan Museum of Art by American diplomat Luigi Palma di Cesnola (1832–1904), played a major role in influencing 19th-century literature, architecture, and art. Tiffany even created a special textured, iridescent glass that he called “Cypriote,” which mimicked the surface and luster of ancient glass that was buried underground for centuries on the island of Cyprus.

INSTRUCTIONS:

1) Look at some iridescent objects from the Morse collection, and think about the shape, color, and texture of each object. What words describe these objects?

- <http://www.morsemuseum.org/collection-highlights/glass/cypriote-vase1>
- <http://www.morsemuseum.org/collection-highlights/glass/window-glass-vase>
- <http://www.morsemuseum.org/collection-highlights/glass/2017-119>
- <http://www.morsemuseum.org/collection-highlights/glass/2018-02311>

2) Gather materials in a designated workspace. Cut and/or tear black paper into smaller pieces (Fig. 1).



Fig. 1

- 3) Fill the aluminum baking tray halfway with room-temperature water. Drop one or two droplets of clear nail polish onto the surface of the water (avoid touching the brush to the water). As the droplet comes in contact with the water, it will create a thin, iridescent film. Submerge the black paper and “scoop up” the iridescent film. Lift slowly so the film doesn’t “slide” off the paper and be mindful of any “strings” (Fig. 2–3).



Fig. 2



Fig. 3

- 4) Repeat this process with each piece of black paper. Set each piece on a paper towel to dry (Fig. 4).



Fig. 4

- 5) While the black paper is drying, prepare the cardboard box. Create a clean, smooth surface by “wrapping” the box with a brown paper grocery bag (hint: cutting the bottom out of the bag permits a nice sheet for wrapping). Cut, tear, and glue the bag to accommodate the shape of the box as needed (Fig. 5–6). This step is optional if cardboard box has a smooth, clean surface. The box may also be covered with construction paper or painted.



Fig. 5



Fig. 6

- 6) When both the box and the black paper are dry, cut and/or tear the black paper into shapes. Glue each shape to the outside of the box. Add color between the iridescent shapes using crayons, markers, colored pencils, or other materials if desired (Fig. 7).



Fig. 7

- 7) Allow glue to dry overnight and display (Fig. 8).



Fig. 8

ASSESSMENT:

Students should:

- have a basic understanding of the concept of iridescence.
- be able to explain the basic process of using water and nail polish to create iridescence.
- be able to identify different types of naturally-occurring iridescent surfaces (feathers, bubbles, insect wings, etc.).