This activity blends art and science to explore the photographic process called a cyanotype. Look at the examples above from the Spencer Museum of Art and Kenneth Spencer Research Library’s collections and learn more about each image below.

**What is a cyanotype?**
A cyanotype is a type of photograph that’s easy to spot by its blue, or cyan, color. To make a cyanotype, a piece of paper is coated with a mixture of chemicals that are sensitive to sunlight (specifically ultraviolet radiation). Sunlight triggers a chemical reaction to form Prussian blue. When found objects or photographic negatives are placed directly on top of the treated paper and exposed to sunlight, areas that are covered will remain white, while anything not covered will turn blue. After exposure, the print is rinsed in water and the photograph is hung to dry. Cyanotypes go by several other names: blueprint, Prussian blue, ferroprussiate, sun print, photogram. They were most commonly used between 1842 and 1950.

**Anna Atkins:** Between 1843 and 1853, Atkins used the cyanotype process to create her botanical study *British Algae: Cyanotype Impressions*, the first to be photographically printed and illustrated.

*What do you notice first? What details do you see?*

**Barbara Kasten:** Kasten used a piece of netting to create this image.

*What objects do you have at home that might make interesting shapes and patterns?*

**Annie Wight:** This cyanotype is from a collection of photographs depicting Wight’s home in Douglas County, Kansas, showing plants around the yard and still lifes in the home. This is a contact print. A photographic negative of the still life was placed on top of the cyanotype paper and exposed to sunlight.

*Negatives are transparent, allowing light to pass through. What else is transparent?*
INSTRUCTIONS – Make Your Own Cyanotype!

In the packets from the Spencer’s Little Free Museum, you will find:

- Two sheets of double-sided 5×7” cyanotype paper inside a light-blocking bag. Don't open the bag until you are ready to create a print! (If you don’t have a kit from the Spencer, you can find this paper at most craft stores or online retailers by searching for “cyanotype paper” or “sunprints.”)
- Two clear protective sleeves for handling and storing your finished prints.

Additional supplies needed:

- One piece of regular 5×7” paper
- A selection of interesting objects
- A clear sheet of plastic and/or weights
- A tray or container to hold water and the cyanotype paper
- One clean, smooth towel

Make your own cyanotype:

1. **Design your image.** Look for objects where you live that have interesting shapes and patterns, such as plants, string, toys, lace, jewelry, paper cutouts, transparencies, negatives, or sheer fabric. Practice arranging your design on a sheet of regular 5×7” paper.
2. **Prepare for printing.** Find a sunny location and assemble all your found objects close by so they are ready to place onto your cyanotype paper.
3. **Expose your print.** Remove a sheet of cyanotype paper from the light-blocking bag. Quickly arrange your found objects onto the sheet and expose it to sunlight for 15–20 minutes. To hold your design in place, use a clear sheet of plastic or weights around the perimeter (see picture below). **Note:** The cyanotype paper is light-sensitive on both sides. To print on both sides, first expose one side to the sun, then flip it over and arrange a new design on the back, or just create a design on one side.
4. **Wash your print.** Remove the print from the sunlit area. Place it in a tray of clean water and gently move it around until the water runs clear.
5. **Dry your print.** Place print on a clean, smooth towel and blot dry, or hang dry.

Art Conservation Tips:

Cyanotypes are pH sensitive and can be damaged by contact with alkaline materials. They also have fragile surfaces that are easily scratched. In your packet are clear protective sleeves that guard against hand oils and dirt. Cyanotypes are also light sensitive. Store your print flat and in the dark when not enjoying it, and display it in an area away from direct light. You can label your print on the back by writing gently with a graphite pencil.

Resources: