



Solar Art

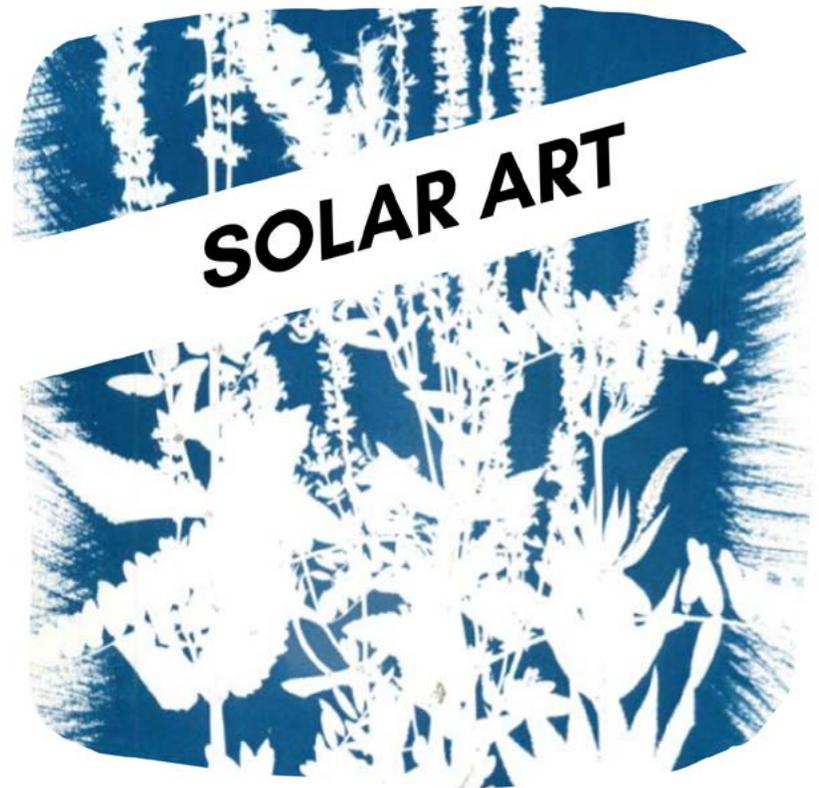
S R P S O C P Y G P P
 E E K R H Y V M C U H
 X A N I I A O W B I O
 P C U S L N D Q U N T
 O T R U I O T E L S O
 S E Q S G T L D H D G
 U D O U H Y I I T M R
 R L I N T P L V X K A
 E H L N F E B S I A P
 O E T Y D K B M X T H
 W Q S O L A R C B L Y

Word List

PHOTOGRAPHY CYANOTYPE REACTED SHADE SUNNY
 SENSITIVITY EXPOSURE SOLAR LIGHT PRINT

4-H at Home

ON THE GO LESSON



INCLUDES

SOLAR PRINT PHOTO PAPER

4-H PROJECT AREAS

PHOTOGRAPHY | STEM



IOWA STATE UNIVERSITY
Extension and Outreach

INCLUDED SUPPLIES

- *Solar Print Photo Paper, also known as Cyanotype Photo Paper or Sun Art Paper, can be purchased online or found at art stores and sometimes Walmart and Target*

ADDITIONAL SUPPLIES

- *Materials such as leaves, insects, stencils, plants, semitransparent materials*
- *Sunscreen (Optional, can be used to block UV light)*

DO REFLECT APPLY

Cyanotype was developed in 1842 by Sir John Herschel (1792- 1871), only three years after the official discovery of photography. He experimented with concepts revolving around light-sensitivity of silver salts, metals, and vegetation. Cyanotype photography is sometimes referred to as solar prints because early artists captured images using special paper that reacted to the ultraviolet rays from the sun. Ultraviolet rays are shorter light waves that are produced by the sun. We cannot see ultraviolet rays.

Be aware this process uses chemicals that should not be consumed. If any gets on skin, it will stain if not washed off immediately. Be careful to not get solution on clothing, tables, or floors as it will stain. Do not do this activity while consuming food or snacks of any kind. Always wash your hands after working with chemicals.

The paper will turn blue in areas that are exposed to sunlight; areas that are not will remain white. Prior to starting this project gather materials that you think would make interesting images. Examples include leaves, insects, or stencils. When placing these objects directly in contact with the light sensitive paper, the result is called a contact print or photogram.

In an area without direct sunlight, lay the objects flat in contact with the surface of the paper. Cover objects with a piece of glass or clear plastic to ensure your objects stay in place in the wind if exposing outside. In photography, exposure is the process of placing light sensitive paper or film directly in front of UV light or radiation. Find a sunny space to expose your cyanotypes make sure not to accidentally shade or block light from hitting the surface during exposure. After waiting about 10 minutes, read

the package as all paper has different sensitivities to light. When the exposure is finished quickly remove your items and rinse the paper in room temperature water until the water runs clear (1-2 minutes). All yellow green color should wash out leaving only blue and white. Be careful to not tear the paper. Let the project dry flat. Place the paper on a paper towel and then place a second paper towel on top and blot the photograph to soak up the residual water. Then the project can be laid flat to dry. And... Voilà! You now have a unique masterpiece. If paper curls, you may press the cyanotypes with heavy books. Remember to wash your hands!

What did you discover? Did your design turn out the way you expected it to? If you were to do it again, what would you do differently? Even though this is an early method of photography, why do you think artists still use it today? Does digital photography require light? If you are interested in learning more, check out how insects use ultraviolet light to see, or look for more examples of cyanotype photography online.

Adapted from Monarchs on the Move & Cyanotype Camp, Iowa 4-H

LEARN MORE

Project areas are topics that 4-H members can learn about on their own, with a friend, at a club meeting, or at 4-H events. To learn more about the project areas you can explore in 4-H, please use our free resources online at <https://store.extension.iastate.edu/product/15266>

To get involved with 4-H in Cherokee County, please contact Debbie, Cherokee County 4-H Youth Coordinator, for more information.

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