

Ames Public Library @HOME Activities

Photography!

Photography is using a camera to take pictures. A camera is an instrument that captures images. Photography helps us to look at the world in a different way, record, and share special moments in our life. Photography helps us tell stories and stay connected.

See a related video on the Library's YouTube Channel at <http://bit.ly/APLvideos>.

Books and Media:

Title	Author / Performer	Call Number
<i>Guide to Photography</i>	Holzweiss, Kristina	J 537.078 HOL
<i>Picture This: Fun Photography and Crafts</i>	Friedman, Debra	J770 FRI
<i>Come Look With Me – Discovering Photography With Children</i>	Meyerowitz, Joel	J770 TUC
<i>Being a Photographer</i>	Thomas, Isabel	J 770.23 THO
<i>National Geographic Guide for Kids - Photography</i>	Johnson, Neil	J 771 JOH
<i>The Kids' Guide to Digital Photography</i>	Bidner, Jenni	J 775 BID
<i>Click: A Story about George Eastman</i>	Mitchell, Barbara	J 920 EASTMAN, G

Websites:

URL	Notes
https://natureprintpaper.com/pages/frequently-asked-questions	<i>This site answers many questions and offers advice on how to use the paper in the kit.</i>

Vocabulary:

Aperture – The opening in a camera that lets in light.

Background – The area of a photo that was far away from the camera.

Captions – Words presented with photos to explain the photo.

Digital camera – A camera that captures images in a digital file instead of on film.

Editing – Choosing photos for a sequence or series and deleting the ones not needed.

Exposure – The amount of light which reaches the camera sensor or light-sensitive film.

Film – A strip that has a coating on one side that is light-sensitive.

Foreground – The area of a photo that was close to the camera.



Lens – The piece of glass or plastic where the light collects to enter the camera.

Photography – “Drawing with light” in ancient Greek – making images with a camera on light sensitive film that is developed into pictures.

Silhouette – The outside shape or outline of an object.

How does the sun sensitive paper work?

Sun sensitive paper in the kit is coated with light-sensitive chemicals, which react to the light waves and particles when exposed to light. When objects are placed on the blue light sensitive side of the paper, the objects block the sun light while the areas that are not blocked turn light blue. When the paper is washed in water after the exposure, the water stops the process and fixes the images on the paper.

Photosensitive or light sensitive paper is made by coating a sheet of paper with a water-soluble, bluish-green compound called iron (III) hexacyanoferrate (III), $\text{Fe}[\text{Fe}(\text{CN})_6]$. The common name for this chemical is Berlin Green, a well-known photosensitive chemical. When exposed to ultraviolet light (UV), a chemical reaction takes place where the water-soluble Berlin Green changes into a water-insoluble chemical called iron (III) hexacyanoferrate(II), $\text{Fe}[\text{Fe}_4(\text{CN})_6]_3$. The common name for this chemical is Prussian Blue. When you rinse your print in water, the water-soluble Berlin Green washes away, but the water-insoluble Prussian Blue remains fixed on the paper. The intensity of the Prussian Blue depends on the amount of time the paper is exposed to the light source and the intensity of the light source. For example, Sun Sensitive Paper doesn't work nearly as well on a cloudy day as it does on a sunny day.

Source: <https://www.stevespanglerscience.com/lab/experiments/sun-sensitive-paper-experiment/>

Take Away Kit: Sun Print

Bag Contents:

- 2 Sun sensitive paper
- 1 Snowflake
- Note: Your sun sensitive paper is between the construction paper folder. **Do not expose paper to sunlight until you are ready to print.** For best results **choose a nice bright day for this experiment**, it's okay if the outside temperature is low, the chemicals on the paper are only sensitive to light.

Directions for printing:

- Select FLAT objects you wish to print – the snowflake included in this kit works really well. Other could include keys, shells, leaves, etc.
- Remove the sheet of paper. Lay it flat on a surface outside where there is direct sunlight with the BLUE side of the paper facing up. Quickly place the objects to print on top of the BLUE side of the paper.
- Expose the paper to the sun until the blue turns very pale blue – about 3 mins. Time may vary, try not to overexpose the paper.
- Once the time is up, remove the objects from the paper, and bring it in quickly.
- To fix or make the image permanent soak the paper in a container of paper for about a minute. Dry flat. The image will sharpen during drying time.
- The images on the paper are permanent. Have fun and enjoy making prints!

Source: www.natureprintpaper.com