UC RIVERSIDE | Gluck Fellows Program of the Arts

# Sun-Bleached Photograms

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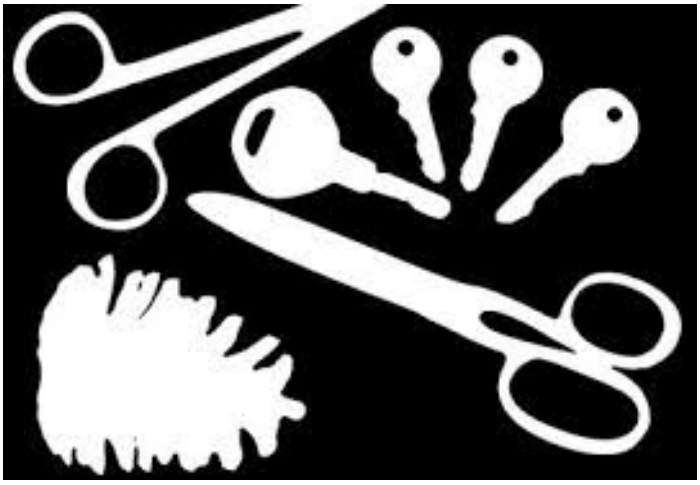
## WHAT IS A TRADITIONAL PHOTOGRAM?

A photogram is an image making process without using a camera. Invented by German scientist, William Henry Fox Talbot (1800-1877) in the 19th century, a photogram is considered to be one of the first ways to make an image with photography. Traditionally, photograms are made with paper that has been specially coated to be light sensitive and chemically processed. To make a photogram, it involves placing objects directly onto a light sensitive surface, which is called ‘contact printing.’ After placing the objects onto the surface, it is exposed to light and processed to make an image.

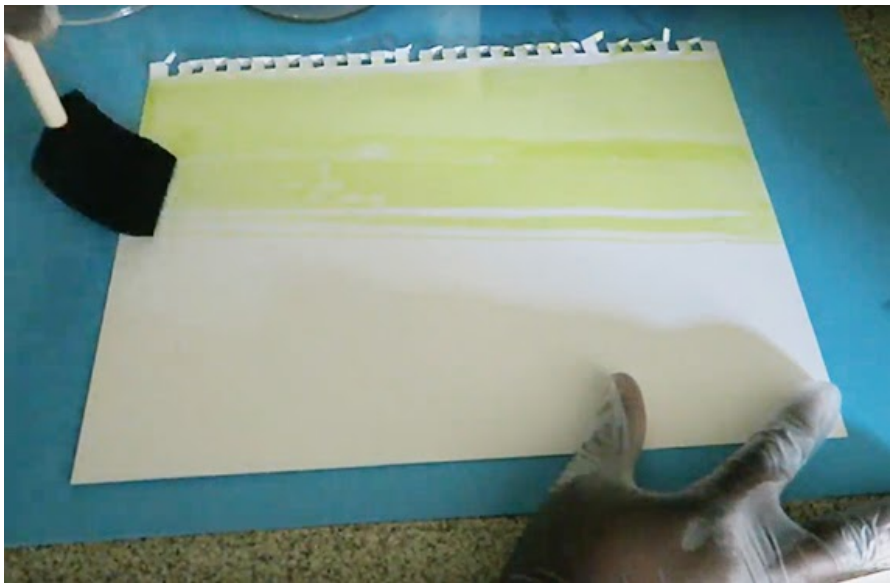
Objects on a photogram before exposure.[1]



Example of a traditional photogram.[2]

[1] https://www.ephotozine.com/article/making-a-photogram---traditional-darkroom-ideas-4688
[2] “” “” “”


Cyanotype chemicals.[3]



Paper that is being coated to be light sensitive.[4]

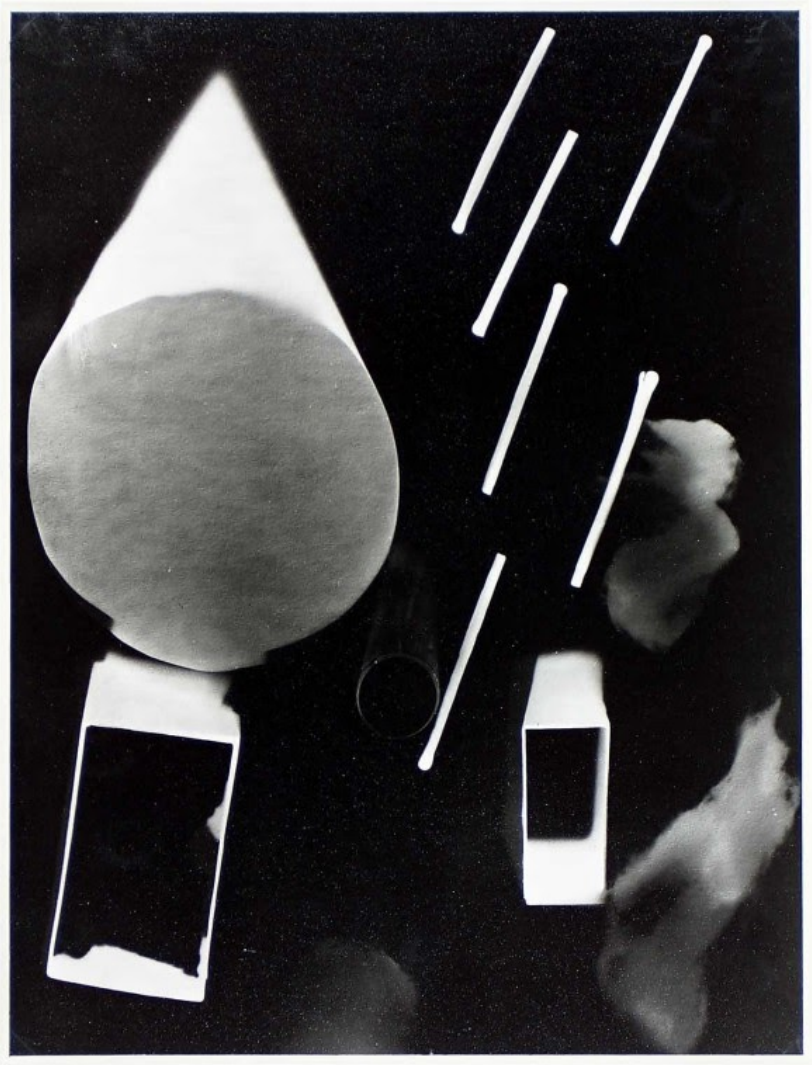
[3] https://www.bostick-sullivan.com/cart/501.html
[4] https://www.picturecorrect.com/tips/cyanotype-photography-at-home-tutorial/

Traditional darkroom photography processing trays.[5]

Cyanotype photogram being processed.[6]

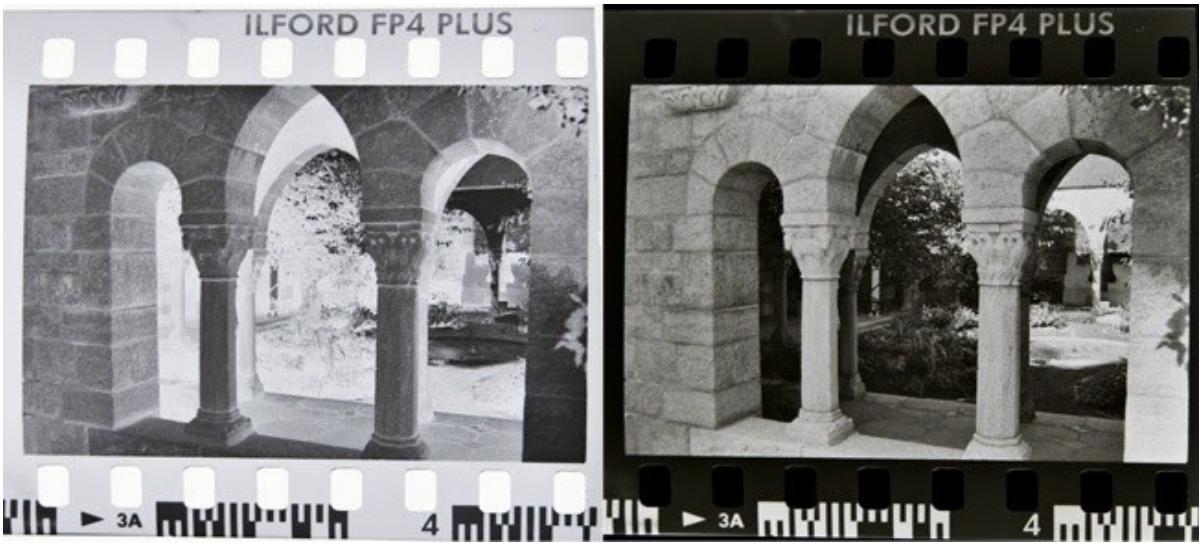
[5]https://lensnotes.com/darkroom/darkroom-printing-equipment-essentials/
[6] https://www.seasaltcornwall.co.uk/blog/08/2018/making-our-cyanotypes/

After a photogram is exposed to light and processed, the general results are shadows or silhouettes where the objects were placed to prevent light from reaching the material surface. The surrounding area that has not been covered, becomes darker or fully black from being exposed to light. The result is a negative or reversal, where white tones are the shape of the objects, semi-transparent is grey, and the rest of the surrounding space will be black.



Man Ray *Rayograph*, 1922.[7]

[7] https://www.moma.org/artists/3716#works




Example of a negative being converted to a positive.[8]

[8] https://www.quora.com/How-does-film-photography-works

## BRIEF HISTORY OF PHOTOGRAMS

William Henry Fox Talbot.[9]

"T*wo Leaves*," Willian Henry Fox Talbot, Photogenic drawing, 1839.[10]

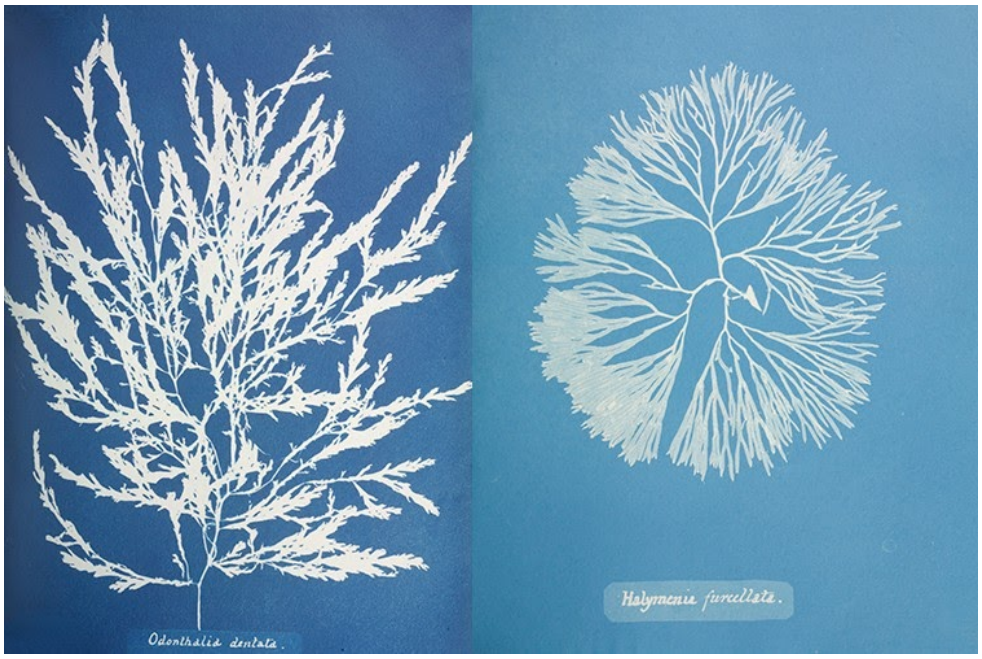
Early uses of photograms were used among botanists and artists, during the mid to late 19th century, and it's resurgence as another art form within photography in the 1920s. At first, it was a way to experiment with the idea of recording small parts of nature and objects directly onto paper. William Henry Fox Talbot was frustrated by not being able to draw nature scenery and turned to his interest in light and chemistry. He learned by coating paper with silver nitrate allowed for a piece of paper to be sensitive to light. Talbot considered photograms as *Photogenic Drawings*, or drawings produced by light onto paper.

[9] https://www.eastman.org/node/6733
[10] https://projects.iq.harvard.edu/saltprintsatharvard/photogenic-drawing

Portrait of Anna Atkins.[11]

Anna Atkins (1799-1871) was a botanist and used photograms as a way to visually record and document accurate profiles of botanical specimens. She utilized cyanotypes, which is another traditional chemical process to print an image. Atkins has contributed to a scientific reference book called *British Algae: Cyanotype Impressions*, published in 1843. The *British Algae: Cyanotype Impressions*, was the first of its kind to use a light sensitive process in making a visual reference book. Along with Anna Atkins' images and this book, has allowed photography to be considered as an accurate and real-life representation for scientific illustrations.

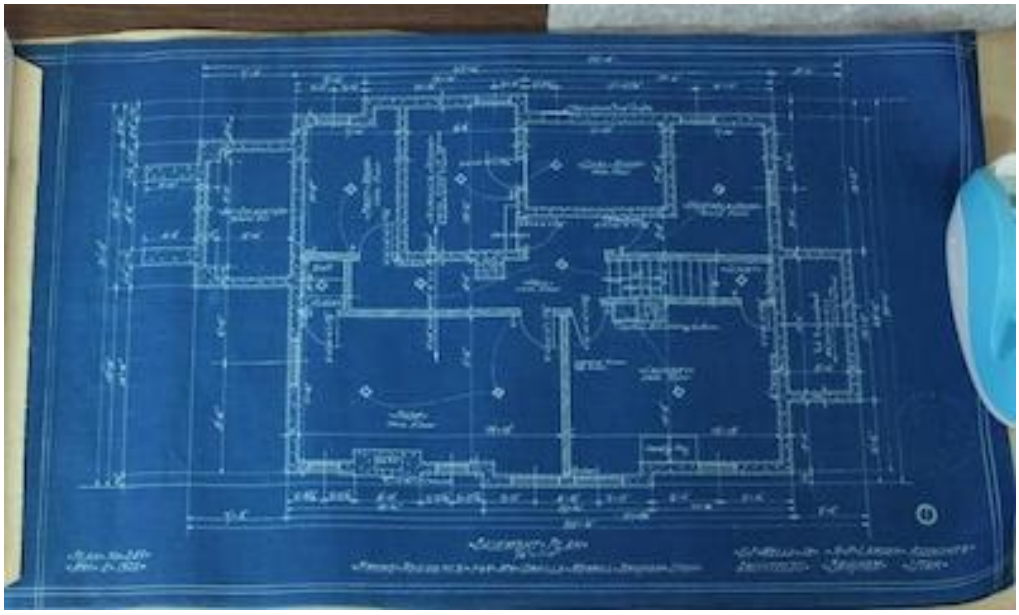
[11] https://www.nhm.ac.uk/discover/anna-atkins-cyanotypes-the-first-book-of-photographs.html




Cyanotype by Anna Atkins.[12]

Cyanotype by Anna Atkins.[13]

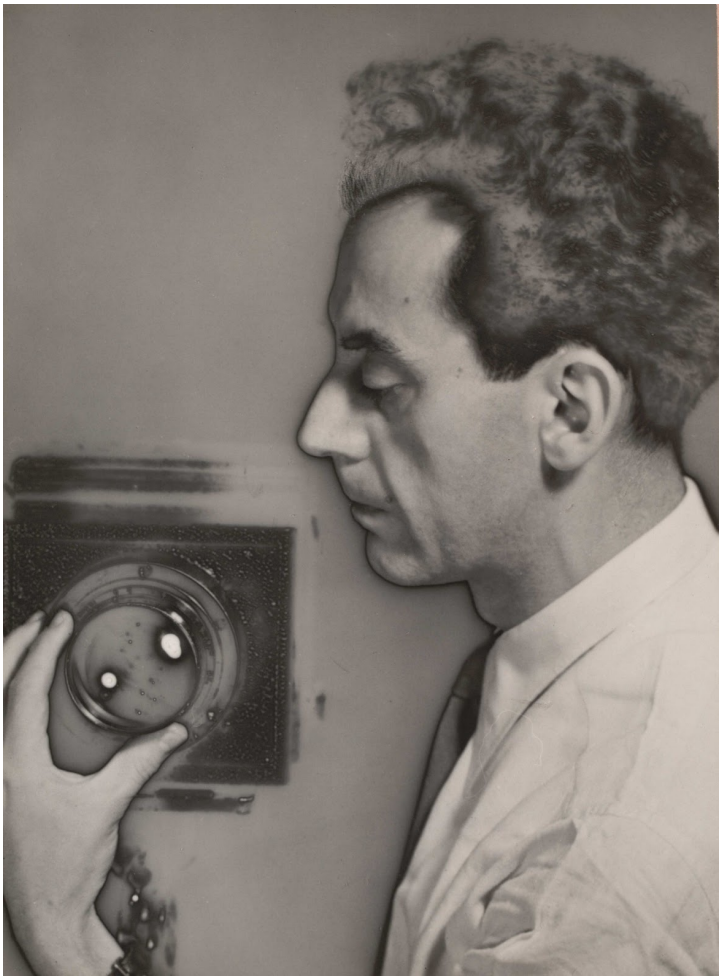
[12] https://www.nhm.ac.uk/discover/anna-atkins-cyanotypes-the-first-book-of-photographs.html
[13] “” “” “”



Example of a historical blueprint, 1922.[14]

Another way photograms were used was to create copies of architectural drawings and plans called blueprints. Blueprints have been developed by John Hershal (1792-1871) in the mid 19th century as a way to cheaply and efficiently reproduce original drawings. Although it is not quite like a photograph, the same principles of contact printing apply similar to photograms, but with actual drawings instead. Blueprints are also cyanotypes like Atkin's usage for her work, which is why the prints are blue!

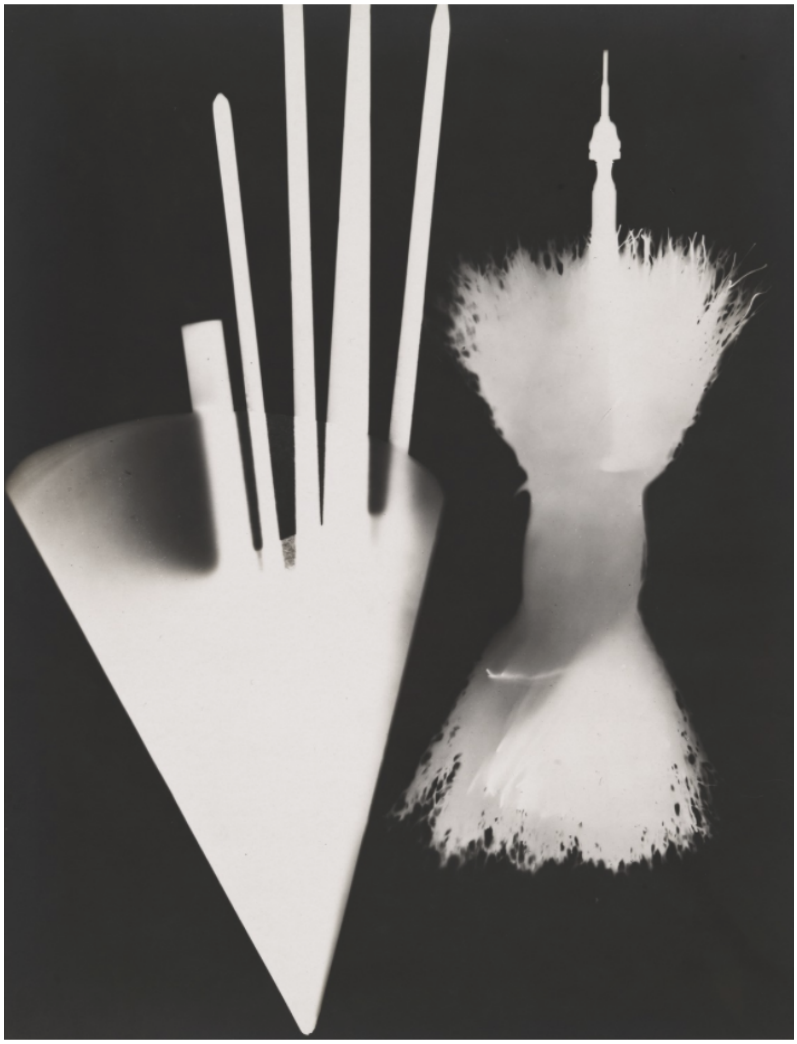
[14] http://collections.boxeldermuseum.org/index.php/Detail/objects/2377



Man Ray, *Self-Portrait With a Camera*, 1931.[15]

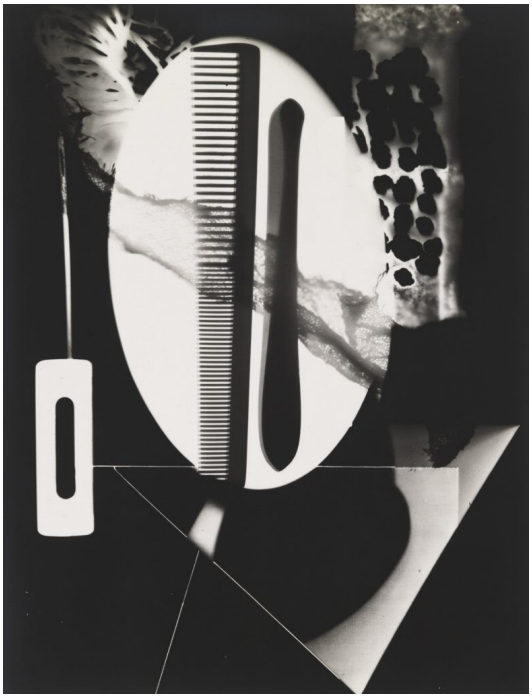
In the 1920s, saw a resurgence of photograms away from the practical applications. Avant-Garde artist Man Ray (Emmanuel Radnitzky; 1890 - 1976), experimented with photograms to further expand his own artistic practice. Dubbing his photograms as *Rayographs*, his images almost seemed like the objects were in motion but captured stactily. Man Ray arranged common household items together to create an abstraction, such as a comb, slinkee, and other objects. He would also do paper cut outs to make distinctive shapes within his compositions.

[15] https://www.moma.org/collection/works/46309



Man Ray, *Rayograph*, 1922.[16]

[16] https://www.moma.org/collection/works/49575?artist_id=3716&page=1&sov_referrer=artist



Man Ray, *Rayograph*, 1922.[17]

Man Ray, *Rayograph*, 1922.[18]

[17] https://www.moma.org/collection/works/49571?artist_id=3716&page=1&sov_referrer=artist
[18] https://www.moma.org/artists/3716#works

**Now that we have covered a brief history of traditional photograms, let's move on to our application in making photograms in an alternative way!**

**For our purposes, we will be making Sun-Bleached Photograms.**

**This is going to be a safer way for making photograms and does not involve any need for chemicals!**

**But first, I will go over what Sun-Bleached is…**

## WHAT IS SUN-BLEACHED?

Sun-bleached hardwood floor from having direct sunlight through the house window.[19]

Sun-Bleaching occurs through a natural process called *photodegradation.* With *photodegradation*, it is a physical change of material surfaces being exposed from the UV rays of the sun. The more UV rays, the greater and more visible the change will be.


Effects of UV exposure on polypropylene rope.[20]

[19] https://tintxpert.com/2019/04/29/protection-sun-faded-floors-dubuque-iowa/
[20] https://en.wikipedia.org/wiki/Photodegradation#/media/File:Failedrope1.jpg

To simplify, when you leave things outside or something is in constant exposure to sunlight, things will begin to fade or get lighter overtime. Another way to consider this distinctive change is a term called “sun damaged.” Some material surfaces will fade more quickly than others. As damaging and destructive as that sounds, Sun-Bleaching also helps brighten our clothes and fabrics when we leave them outside to dry!

Sometimes we don’t want our precious items and possessions to fade in color, but we want that to happen in order to make our photograms!

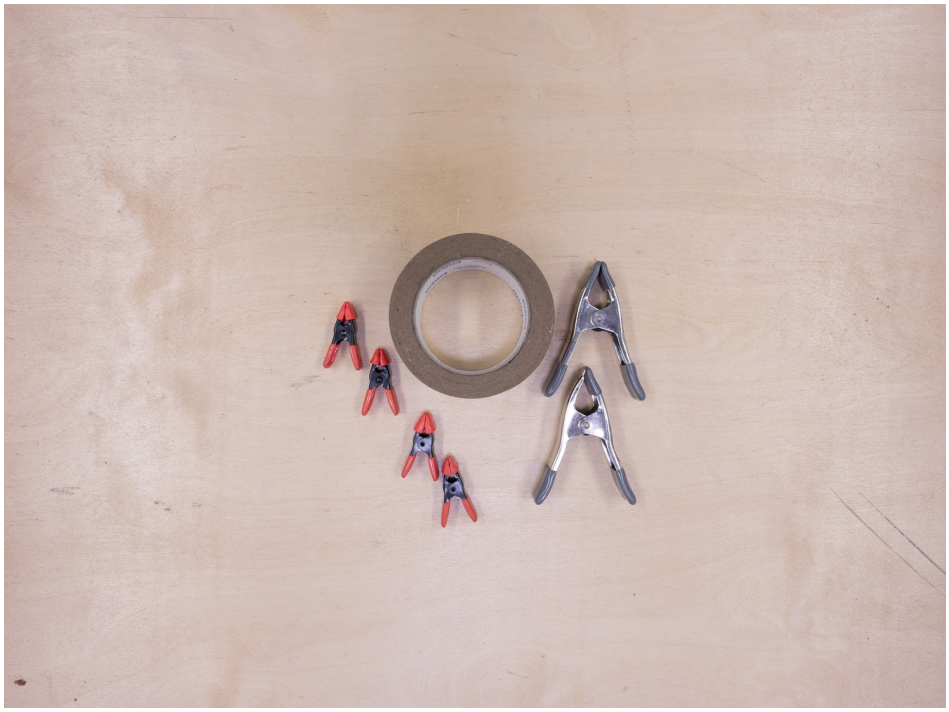
**Now, let’s start making our own photograms!**

**MATERIALS AND SUPPLIES**

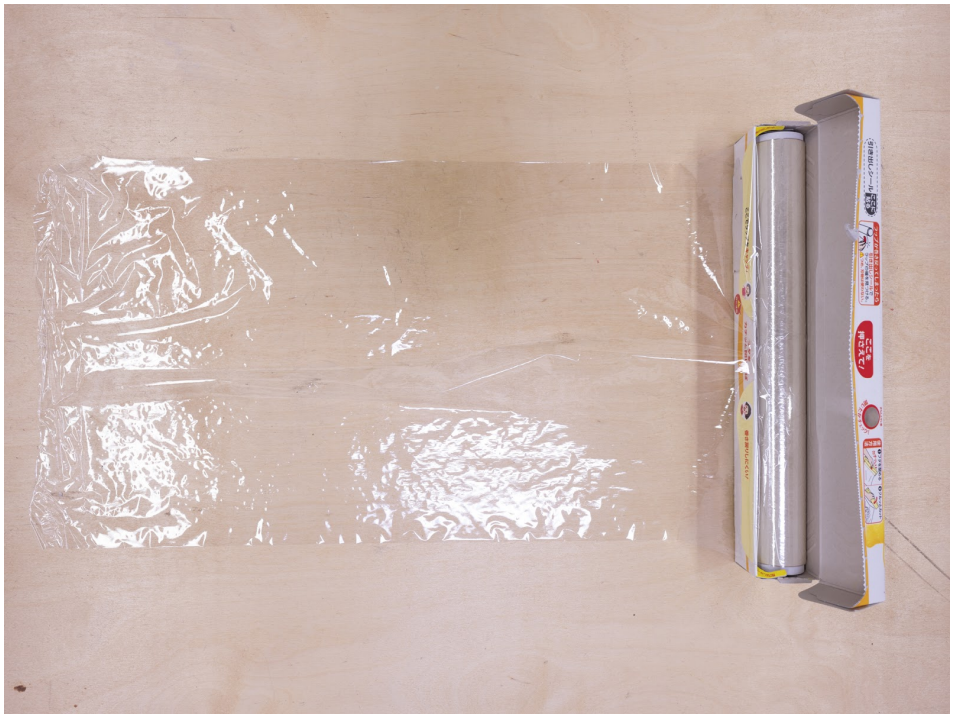
1. Construction paper (available at craft and big box department stores)
    a. Dark color construction papers will show the best results


2. A piece of foam board or cardboard that is larger than your construction paper (this needs to be sturdy material!)

3. Clamps and tape



4. Plastic saran wrap



** As an alternative to saran wrap, you could use acrylic plexiglass, acetate sheets, or mylar. These materials will allow an easier time to set up, but saran wrap is the cheapest and just as effective as the other materials mentioned.


(For my steps on making a sun-bleached photogram, I will be showing you how to do it using saran wrap).

5. Objects and items to make photograms with!
    a. Make sure the objects are flat and not sharp, otherwise the seran wrap will rip! Also, if an object is not flat, then there won't be a noticeable imprint left on the paper.

6. Last and not least… The sun!

## HOW TO MAKE SUN-BLEACHED PHOTOGRAMS

**Now, this works best at noon, when the sun is at its highest point of the day.**

1. Place construction paper on foam board or cardboard
    a. Arrange selected items on construction paper
    b. Make sure the objects will be able to flatten so there is a strong edge visible for your photogram.

2. Stretch plastic saran wrap over your photogram set-up
    a. While pulling the saran wrap, hold your objects down carefully so your composition on the paper won't change.
    b. Be sure to leave at least 4"- 6" inches of extra saran wrap on both ends.

3. Use clamps to hold the saran in place on one side for now as pictured below.
    a. Make sure your objects don't get blown away if you’re setting this up outside!
    b. Readjust your clamps so the saran wrap is not loose on the top and bottom of your board.

4. Continue securing the saran wrap towards the middle of your board (while still trying to stretch the saran wrap nicely)
    a. Readjust your clamps and the composition of your objects on the paper as needed.

5. Tear off saran wrap carefully from the roll
    a. Attach a strip of tape (at least 3 - 6 inches) on the other end of your saran wrap.
        i. Carefully wrap it over so the items you have don't shift around too much.

6. By having a strip of tape on the end, you will be able stretch saran wrap more easily to secure it down to your board as shown below.

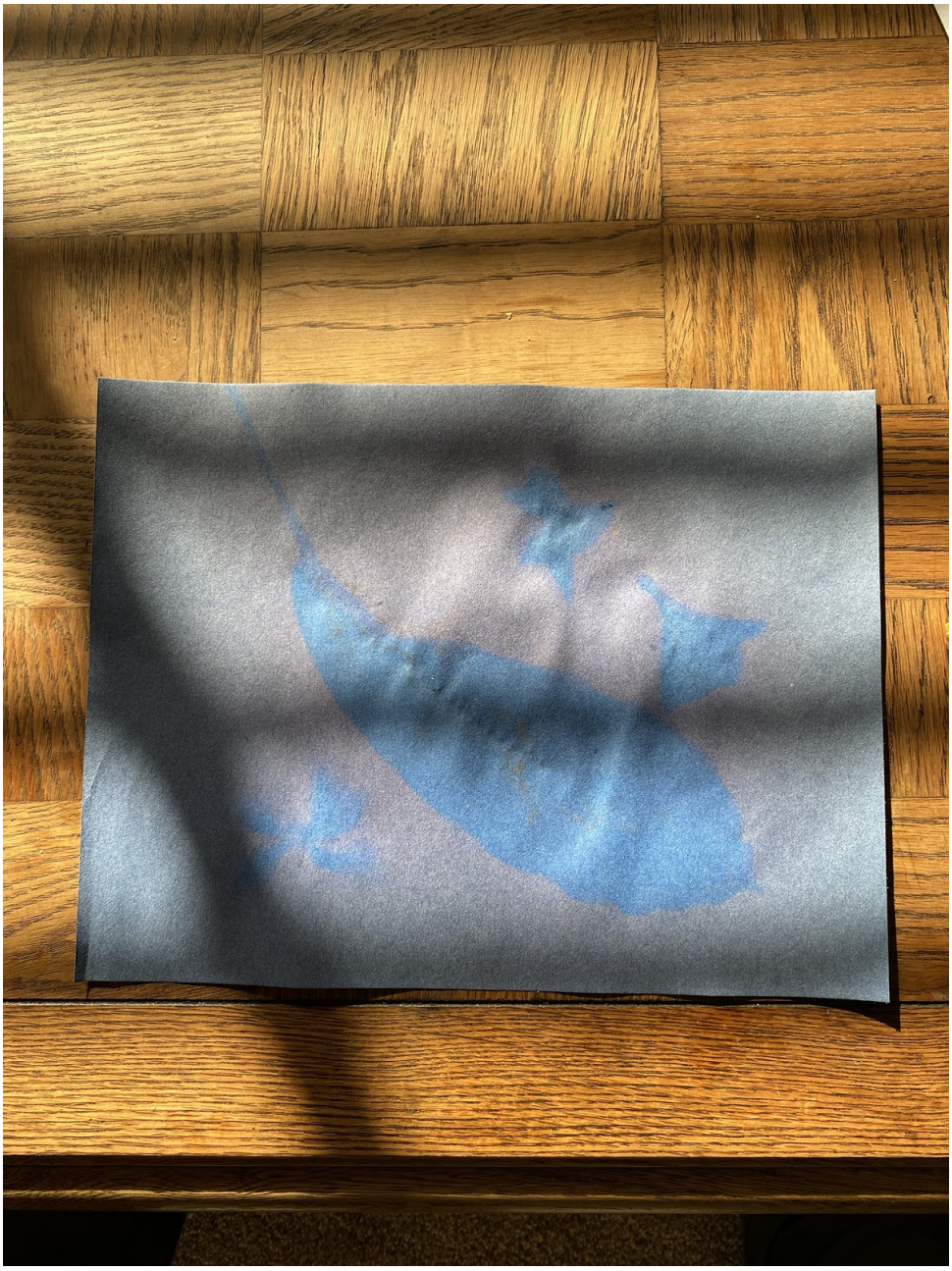
7. Redjust the saran wrap tautness as needed. If needed, rearrange some of the objects that shifted around.

8. Now we go outside!
9. Make sure you have a nice and bright spot under the sun and place your photogram facing directly towards the sun.
    a. Leave outside for at least 3-4 hours.
    b. ** Weigh down and secure if necessary, so your photogram won't fly away!

10. Now, all it takes is a bit of patience and make sure that you, yourself are not out in the sun too long without the proper skin protection, shade, and also make sure you're properly hydrated too.

*IMPORTANT DETAILS

1. The picture above shows an example of an improper set up on the left, and a proper set up for your photogram on the right.
    a. (As stated earlier, you could use a piece of glass or acrylic plexiglass to keep your objects and items down during exposure under the sun.



As you can tell, a Sun-Bleached photogram is different from a traditional photogram. In fact, it’s very much the opposite. As stated earlier with a traditional photogram, areas that were covered are lighter in tone and the surrounding area, darker or black. Instead, with our Sun-Bleached photograms, the surrounding area where light is exposed is lighter and where the objects were placed, is darker or the original color of your construction paper.

Both traditional photograms and our Sun-Bleached photograms share the same ideas of contact printing and using light to directly represent objects and things as silhouettes directly onto paper.

Now that you have a basic understanding on how to make a Sun-Bleached photogram, feel free to experiment with the objects and materials you use! The possibilities of compositions and arrangements are endless.

Remember, without light, things won't be visible.

I hope you will enjoy making Sun-Bleached photograms!

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