

San Bruno Looks Up: Create a print of the Sun's Path across the sky with your Pinhole Solargraph!

See Programs.Sanbrunolibrary.org for instructional video.

Kit Contents:

- 1 16-oz empty Aluminum Can
- 1 pushpin
- 5" electrical tape (wrapped around a wooden craft stick. You don't need the craft stick for this project)
- 1 roll of duct tape
- 1 piece of black construction paper
- 2 long zipties
- 1 piece of 5" x 7" light-sensitive paper in an envelope



Solargraph print from camera shown on p.2 after 7 days of exposure .

Basic instructions:

CREATE a "CAP":

- cut an approximately 3" x 8.5" piece from the black construction paper— since the paper is already 8.5" wide, just cut along the bottom at a depth of about 3".
- make small cuts about 1" deep along the long edge
- wrap the paper around the bottom of the aluminum can with the "fringe" towards the bottom. (leave the top open for later) Turn the can upside down and fold the "fringe" over the bottom. Tape the paper to itself so that it stays wrapped around the can. Do not tape the paper to the can.
- cut a sloppy circle approximately the size of the bottom of the can and place over the "fringe."
- cut short lengths of duct tape—about 5" long—and tape over the paper to form a cap. Do not tape to the can!
- take off the "cap" you have made and put it over the open end of the can.

CREATE THE PINHOLE "LENS"

- Choose a spot about half way between the "cap" and the bottom of the can to make your pinhole. It could be helpful to mark this spot with a permanent marker.
- hold the can vertically and insert the pushpin in place you want to make the hole. Push in. This is your camera "lens."
- Unwind about a 3" piece of electrical tape and fold over one end about half an inch. The folded section is your "tab." and the sticky part is the "shutter."
- Place the sticky part of the electrical tape "shutter" over the pushpin hole you have made.

PUT IN THE LIGHT-SENSITIVE PAPER

- Remove the "cap" from your aluminum can and get ready to load in your photographic paper
- In low to moderate light, remove the paper from the envelope.

- The light sensitive side of the paper is a little more yellow and a bit stickier than the plain side.
- Roll the photographic paper with the light-sensitive side inward to make a roll 5" tall.
- Insert the roll into the can, aligning the gap in the paper with the hole.
- Confirm that the paper is not covering the pinhole.
- Replace the "cap" on the can and tape it to the can, wrapping with enough tape so that it will be water-proof.

INSTALL YOUR "CAMERA" OUTSIDE

WARNING: CHOOSE A SECURE, PRIVATE LOCATION ON YOUR OWN PROPERTY WHERE NO-ONE WILL WONDER ABOUT A "SUSPICIOUS PACKAGE" OR TRY TO OPEN/MOVE THE CAMERA. BY PARTICIPATING IN THIS PROJECT YOU ACCEPT ALL RESPONSIBILITY RELATED TO THE INSTALLATION OF YOUR CAMERA.

Use the zipties to fasten the camera so that the pinhole points in the direction of the sun—SouthEast, South or Southwest. A partial vista is fine.

People will not show up in the image—only things that stay in the same place, such as fences, buildings, trees, etc will show in silhouette. The sun's image will literally burn a track into the paper as it moves across the pinhole field of view.

WAIT 7 DAYS TO 12 MONTHS!

The longer you leave up your solargraph, the more sun tracks it will record.

Take down the solargraph camera, put a piece of electrical tape over the pinhole and make an appointment to bring the whole, sealed can to the library to have your image revealed!

If you have a scanner and basic photo editing software and want to do it yourself, here's how:

Remove the cap. If there is condensation inside, you can dry it out with a hairdryer on cool setting

In low to moderate light, remove the paper from the can.

Scan the image in one pass, without using preview, on a flatbed scanner in full color at 400-600 dpi. You'll have a pinkish image. If you "invert" the image digitally it will be a nice blue color. (preview mode makes an extra light-bar pass over your image which will wash out your print). Do not develop the paper. Do not use fixative. Developing chemicals and/or fixative will obliterate the image.

Congratulations! Email us a copy of your image, we'd love to see it!

For any questions, or to scan your finished image at the library: contact Barbara Bruxvoort at the library (650-616-7078; sbpl@plsinfo.org)



San Bruno Looks Up is supported in whole or in part by the U.S. Institute of Museum and Library Services under the provisions of the Library Services and Technology Act, administered in California by the State Librarian.