

A TEACHER'S NOTES: CONSTRUCTING AN SX-70 PINHOLE CAMERA

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This simple project produces a pinhole camera that accepts Time Zero film. Exposures will be relatively long, but this will allow the students to create blurred or ghost images.

Materials Needed

- Polaroid SX-70 camera (used to break the film's chemical pods after the pinhole exposure is made)
- Polaroid Time Zero film
- 2-inch square piece of thin metal (such as from an aluminum pie plate)
- needle
- fine sandpaper
- 4x5 sheet film box
- cardboard strips
- glue
- 1-inch piece of black tape
- darkroom or changing bag

Procedure

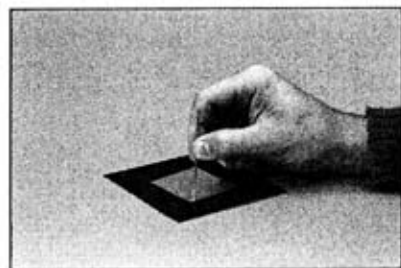
1. Place the piece of metal on a scrap of cardboard. Carefully pierce the metal with just the tip of the needle.

2. Use the sandpaper to sand both sides of the metal very lightly to expand the hole and smooth rough edges. Use the magnifying glass to make sure the hole is round and clean.

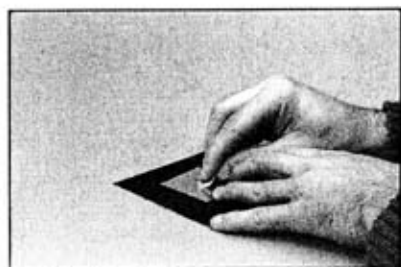
3. Make the camera body from the bottom and middle sections of a 4x5 sheet film box. A 10-sheet box will show a wider-angle image than a 100-sheet box.

4. Cut a 1½-inch opening in the bottom of the box. Glue the piece of metal inside the bottom, centering the pinhole within the opening. Then cover the pinhole with black tape.

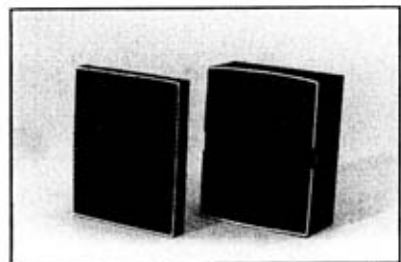
Glue cardboard strips inside the middle section of the box to form a slot that will hold a piece of Time Zero film.



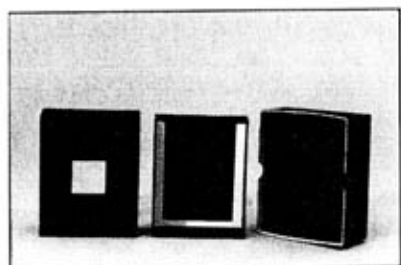
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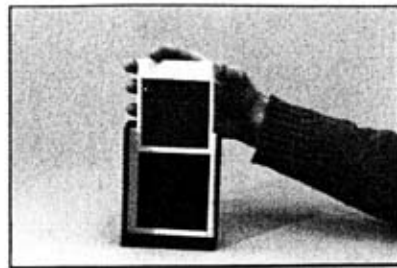


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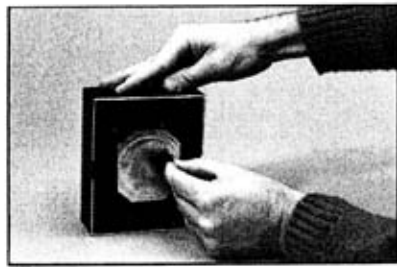
Using the Camera

5. In the darkroom or using a changing bag, remove a piece of Time Zero film from the film pack. (Protect the next piece of film in the pack from being exposed to light either by replacing the piece of cardboard that originally covered the film or by putting the pack into a light-tight container.)

Still in the dark, insert the piece of film into the slot formed by the cardboard strips in the middle section of the camera.



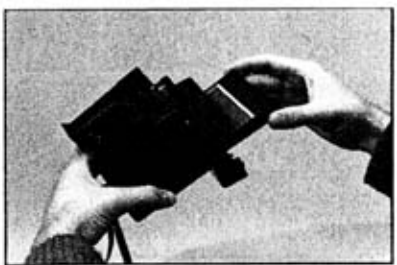
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6. Make an exposure by removing the black tape from the pinhole. Polaroid Time Zero film is rated at ISO 150/23°. With the 10-sheet film box, try an exposure of 5 seconds for a scene in bright sun, 30 seconds for a scene in ordinary room light.

7. In the darkroom or changing bag, remove the exposed film from the camera and put it into an empty Time Zero film pack.

8. Still in the dark, insert the film pack into an SX-70 camera. Close the camera's film-loading door to eject the film. This will break the chemical pods in the film and process it.