



Pinhole Camera Challenge  
Frank Menger July 2020  
#cfprpinhole challenge

Frank Menger is a Senior Researcher at the CFPR at UWE Bristol, specialising in historical photographic processes. For the UWE Bristol School of Art and Design summer festival 2020, Frank is demonstrating how to make a simple cardboard pinhole camera to use as a drawing aid.

A pinhole camera is a basic camera without a lens, which projects an image through a small aperture (a hole the size of a pin) onto the opposite side of an enclosure, onto which a piece of tracing paper is attached. When viewed under a dark cloth (a towel or similar), we can observe an inverted and reversed image, which can be traced off.

For this challenge, you will need:

- A cardboard box
- A craft knife
- Masking tape
- Tracing paper
- Aluminium foil
- A pin
- Pencils
- A thick towel

1. Make sure your box is lightproof, use plenty of tape to cover up any gaps in the cardboard
2. Create a large opening on one side of the box and attach tracing paper over it with masking tape
3. Make a small opening on the opposite side and cover it with a small piece of aluminium foil
4. Pierce the aluminium foil with a needle or a drawing pin. The smaller the pinhole, the sharper the image will be, but it will also be darker

5. Put the camera and your head under a towel and point the pinhole camera towards a brightly lit scene. (You can support the camera on some books or tape it onto the window to steady it)
6. You will see an upside-down and reversed image projected onto the tracing paper
7. Using pencils of your choice, you can now trace the image onto the paper
8. Once you have finished the drawing, you can take the tracing paper of the camera, and add colour or more detail, or use it as a negative in the darkroom to make prints from

**Please Share your Pinhole Camera experiments with us on Instagram (@CFPR\_Research) or Twitter (@CFPRresearch), and tag us in, with the #cfprpinhole**