

## Pringles® Can Pinhole Camera

### What is a pinhole camera?

A pinhole camera is a camera that forms an image using a small hole instead of a lens!

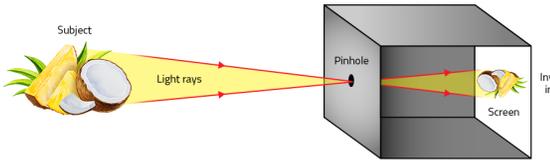


Photo courtesy of: [www.Scienceworld.ca](http://www.Scienceworld.ca)

### How does a pinhole camera work?

Everything has light coming off of it!  
(Like a lightning bug!)



Photo courtesy of: Terry Priest

A pinhole camera samples a small portion of light coming off an object and directs rays from that object towards a screen.

### How is a pinhole camera different from a lens?

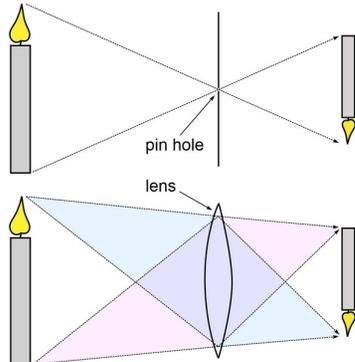


Photo courtesy of: David S. Helsdon

A pinhole only collects a small amount of light and does not produce an in-focus image. A lens collects a lot of light and can produce an in-focus image.

## How to make a pinhole camera:

### Materials:

- Pringles® can
- Wax paper
- Aluminum foil
- Thumb tack
- Tape
- Xacto knife

### Procedure

1. Take your Pringles® can and, using an Xacto knife, cut the can about 2" from the bottom (the metal part).



2. Take the thumb tack and poke a hole in the bottom portion of the Pringles® can.



3. Cut a piece of wax paper just slightly larger than the Pringles® lid and place the wax paper in-between the bottom half and the lid.



4. Tape the top part of the Pringles® can back on.



5. Using about 1' of foil, wrap the pinhole camera (to keep light out).



6. Go outside and look through your pinhole camera!

## Using your pinhole camera



Above is what my backyard looks like through my pinhole camera! It's best to use the pinhole camera outside because there is a lot of light outside.

### Fun Fact

Historians believe pinhole cameras were used a long time ago by artists to sketch out their paintings. The reason they think this is because many paintings from the time before cameras had all the right proportions!

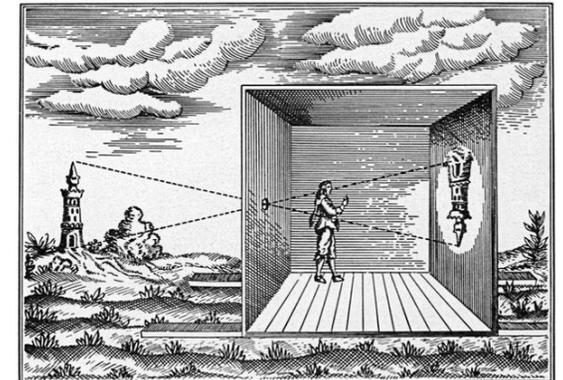


Photo courtesy of: [www.Matrice.no](http://www.Matrice.no)