

# Camera Obscura

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Bootheel Youth Museum, Inc

## Materials and Supplies



2 Toilet Paper Rolls



Scissors



Frosted Scotch  
Tape



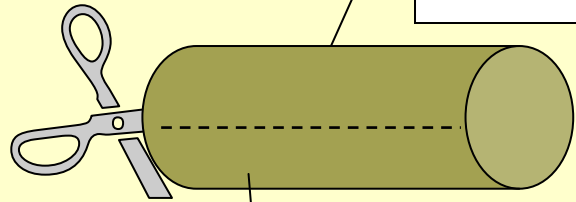
Push Pin



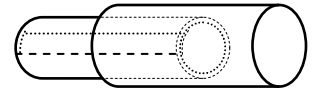
Aluminum Foil

## Tube 1

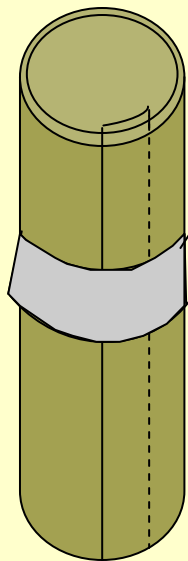
Cut one Toilet  
paper roll  
length wise



After cutting the tube down the  
middle insert it into the other  
tube. Make sure it will slide  
back and forth easily



Step 1



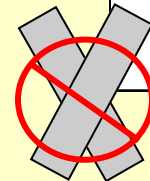
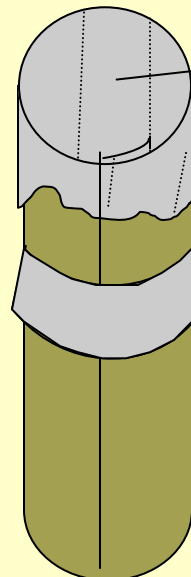
Tape toilet #1  
paper roll so it  
will not unroll

Step 2

## Tube 2

Make the ground glass  
by stretching frosted  
scotch tape across the  
top of paper towel  
roll.

Do not cross the  
tape

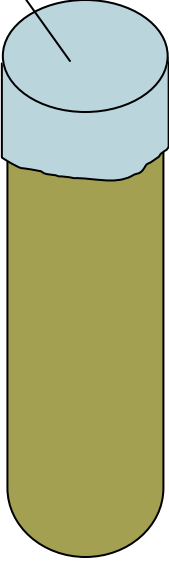


Step 3

# Camera Obscura

**Tube 2**

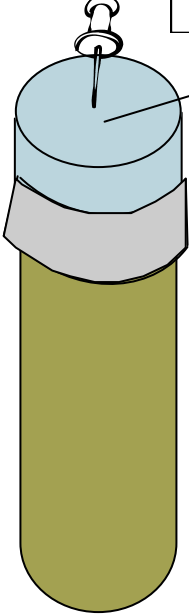
Stretch tin foil over top and tape in place



**Step 4**

**Tube 2**

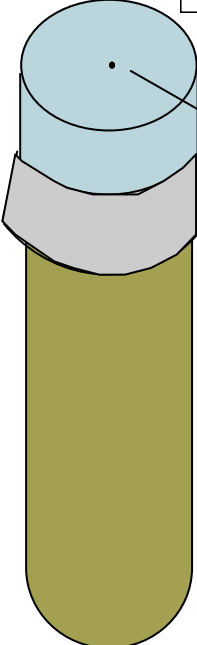
Ask an adult to make a small hole (aperture) using a pin in the center of the tin foil



**Step 5**

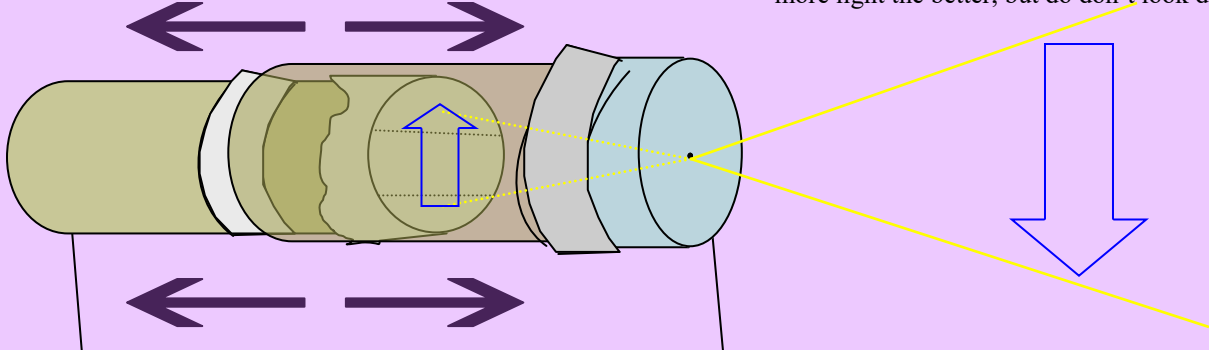
**Tube 2**

The smaller the hole the more focused the image. Start with a small hole you can always make it larger later.



**Step 6**

Go outside and try out your new camera obscura. The more light the better, but do not look directly at the sun



Slide Tube 1 inside Tube 2. To focus and make image smaller or larger move inner tube back and forth.

The hole or aperture allows light rays to flow into the camera. The image is bent when it hits the edge of the aperture and flips over. When you look through the roll pretend a movie is playing on the scotch tape this is where you will see the upside down image.