One of the challenges we encourage our Scouts to participate in is the Pinhole Camera Challenge. Scouts can make their own camera from a few easy-to-get materials.

Needed materials:

Empty box, can, or cardboard

Tape

Scissors

Black paint

Aluminum foil

Film, not in a canister, try 3x3 film paper or similar

Dark covering or draping

Scouts can make their camera out of nearly anything, a box, a tube, or cardboard that can be rolled up. Roll cardboard into a tube shape and tape it in place. Be sure to wipe out the inside your chosen camera and remove any dust or dirt. Now cut off both ends of the tube or box, so both ends are open.

Paint the inside of the box or tube black, the inside should be as dark as possible. Wait til dry.

Wrap aluminum foil around one end tightly. Using a pushpin, make a small hole in the center. Make sure the hole is clean and open with no debris in it that could warp your picture.

Go into a dark room, or if you don't have access to one, choose as a dark a room as possible, shutting off the lights and pulling curtains. Next to black, the best color for the room to be painted is red or gold, if that a possibility.

On the other end of the box or tube, which does not have the aluminum foil, tape your film over the open end. Whenever film is removed from its packaging, it is in danger of being exposed. When you leave the room but sure to put a dark covering over the end of the camera which has the film taped to it. Cover the pinhole firmly with your finger.

It is essential to make sure neither your camera nor your subjects move while taking the picture. The camera should be placed on a tripod or other object which can't move. If you don't have access to a tripod,

trying putting it on top of a heavy object and taping it in place.

If the lighting is bright, you will only need to expose the film for about a tenth of a second, if the light is lower, you will need to expose the film for longer.

Once your camera and subjects are in place, remove the dark covering from the film side of the box or tube.  When you are ready to take your picture, remove your finger from the pinhole.  When a moment or two, depending upon the light, has passed, put your finger back on the hole.

You now have a picture, but it won't look like one until it's developed.

If you have access to a dark room and photo developing equipment, you can develop the photo yourself!  If not, any local place that develops film should be able to do it.  Camera shops can certainly make your photo look great!