+Blue +Red +Orange +Green

+ Activities – **Pinhole Photography**

+Pringles Tube Pinhole Camera

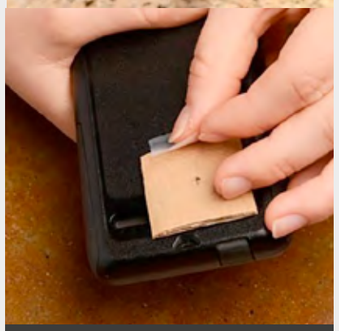
What you need

- A Pringles tube
- Translucent paper
- Something to put a small hole in the base
- Something to cut the tube

What you do:

- Cut the tube off about 2 inches or so from the base, you don't have to measure it.
- Dust it out, to make sure there are no bits of card or Pringles left.
- Cut a piece of the inside packet of a cereal box or tracing paper to just a bit larger than the lid of the tube.
- Make a small hole in the centre of the base of the tube.
- Put the tracing paper or cereal packet over the open end of the smaller part of the tube and put the transparent Pringle lid over it to hold it in place.
- Use the remaining part of the Pringle tube to form a viewing shield.
- Tape it together if you want or just hold it.
- Stand in the middle of a room and look through it at a window, with your other eye closed; the tube being large makes a good light seal around your eye even if you are wearing glasses.
- Stay with it a minute or so for your eye to become accustomed to the light level.
- Ignoring the bright light from the pinhole and looking at the image on the tracing paper, move the tube about and you will find the pin point can be made to vanish and the image moves about.
- Notice that the image is upside down and back to front.

+Smartphone / Camera Pinhole Photography



Here is another fun project for you to try. Pinhole cameras and the idea behind them have been known since the 10th century when a Persian scientist wrote about naturally occurring rudimentary pinhole cameras. The essence is that light from a scene passes through a small point and projects an inverted image on the opposite side. It is a lot like how the human eye actually works.

While this project is a bit of a twist, it is a fun way to experiment and get different effects. If you have kids this is a great learning experience in history and science in a very hands-on way. You can also find out more about pinhole cameras on Wikipedia also as a jumping-off point.

What you do:

1. All you need to turn your Smartphone into a pinhole camera is scissors, tape, a needle or similar sharp object, small pieces of cardboard and, of course, your Smartphone.
2. Take a small piece of cardboard or cardstock paper (half-inch squares work best), and poke a hole in the direct centre using a needle or similar sharp object. Poke a hole in your cardboard square for the Smartphone pinhole camera
3. Next, line up the hole with the Smartphone camera lens. Using the camera function as you do this will make your job a lot easier. Turn your camera on and line up the hole in the cardboard with the lens on your Smartphone
4. Once the cardboard is in place, secure it with tape. Make sure not to cover up any other device items with the tape like the flash, speaker, mic, etc. When in position, tape the cardboard to your Smartphone
5. Using a sheet as a backdrop, a few props and your child's favourite dressing up clothing items, you can create an at home DIY photo booth for your new pinhole camera. Make sure to set up in a well-lit area of your house to take the photos.

   Set up a photo booth in a well-lit area to start taking pictures with your Smartphone pinhole camera
6. Import photos into Instagram. Crop your image so the subject is front and centre and the pinhole 'circle' takes up the edges of the crop square.

   Now you can pull up your pinhole images into Instagram (or other apps you like)
7. Now add Instagram effects to your photo to get the result you want. Add any of the filters and effects you want in Instagram
8. Share your old-time pinhole camera photos with family and friends online, or print your photos and frame them.

+Think

Connecting your camera or table up to the TV is fairly easy (there are lots of how to videos on YouTube). Wouldn't it be nice for your residents to see and share their photographs with others on the big screen!