

## A Pinhole Camera

How does a film camera turn a big scene into a small picture? Make this cardboard camera to see it work!



### You Need

- Empty cardboard cereal or oatmeal box
- Pencil
- Wax paper
- Tape or rubber band
- Blanket

1. Using a pencil, punch a hole in the center of the bottom of the box.
2. Place a piece of wax paper over the open end of the box and secure it with tape or a rubber band.
3. Sit in a dim room that has a bright object in it, such as a lamp or a window that lets in daylight. Put a blanket over your head and camera.

4. Hold the camera at arm's length, with the wax paper toward you and the punched-out hole sticking out from under the blanket. Point the camera at the bright object. On the surface of the wax paper, you will see a picture of the bright object—backward and upside down.

### Did You Know

An old-style film camera uses the same principle as this pinhole camera, but does a better job since it holds a piece of film instead of wax paper. The film is coated with chemicals that are changed by light. Like the pinhole and the wax paper, when the lens of the camera lets light in, a backward, upside-down image is formed on the film.