Camera #1 - Wooden Large Format Camera

- This is the oldest camera in the collection ~ 125 years old.
- It is completely manual - no levers, no switches, no springs, no batteries, no electronics.
- The camera can be opened larger or closed smaller via the rollers on the “railroad tracks” along the wooden base frame.
- The cloth is put over the camera and the head of the photographer to create more of a “dark room” allowing only the light off the subjects to enter through the lens.
- Pictures were taken one at a time with large plates of “silvered glass” or metal sheets as negatives - fragile printed photos were often mounted under glass.
- Families might have to sit for ~10 minutes for enough light to enter through the “black box” to create an image at the back.
- Families had to wait a few days before the photographers returned with their picture.

Camera #2 - the box Browner camera

- This camera was so simple, even children could use it! In the early 1900s, this Brownie cost ~$1.00.
- It uses flexible roll film.

- There is a lever and spring which work together to open and close the shutter of the lens.
- A round screen masked the light that came through the lens to the film, so early on these photos were circular.
- The camera must be physically turned to view objects vertically or horizontally through the 2 viewfinder windows at the front corner.

Cameras #3, 4, 5 - three different brands of a 35mm camera (Nikon, Cannon, and Vivitar)

- The Nikon is completely assembled with the lens at the front and the back wall holding the film within a “dark” space.
- One camera has the front lens casing removed so we can see the “brain” in the camera: show the angled mirror through the round opening towards the bottom of the camera, then flip the camera over and show the flat bottom of the glass prism (pyramid/triangle of glass) which looks like glazed glass with a center hole. Together these are the brain of any modern-day camera - flipping the image so we see it up-side-up in the viewfinder. While students look at the mirror, push the pink button - they will see the mirror bounce out of the way so that all the light entering is not re-directed, but travels straight through to the back of the camera where the film is.
- The third camera has the back wall removed so you can see the back side of the camera where the film is wound and where the shutter curtain opens to very quickly expose the film. (Here is when we introduce the yellow film cartridge on the display

board and the plastic film from the Kodak disposable camera.) When you hear the camera “click” both the mirror is jumping out of the way AND the shutter (eyelid) is opening. You can hold the camera up so that the children can actually see your face through the camera when they watch the shutter open from the back - they have to be quick!

Camera #6 - the yellow underwater camera

- has to be both light-proof and water proof.
- look through the viewfinder and see the objects appear closer. This is because under water things look farther away and this helps compensate to get the correct focus underwater.

Camera #7 - the disposable, plastic Kodak camera in a cardboard box

- Shows how the camera came in its own box and you sent the entire unit away to have the film developed ad simply bought a new camera.
- Has a cartridge of plastic, 36 exposure film.

Camera #8 - an early digital camera, silver, looks like a small computer

- no viewfinder, just point the lens at the subject and the image appears on the screen.
- This camera uses electronics - a built in microprocessor - no mirror or prism - and records the images on a CD-ROM/disk.

Camera #9 - an early digital movie camera

- also shows you the moving image on a screen.