KY Internet2 Day Live Event
October 27, Friday, 2006
Dissecting Camera
The Cleveland Museum of Art

Supplies needed for videoconference:

For each student group –

1. used disposable cameras, preferably all Kodak brand (but not Kodak Power Flash)

Retail film processors usually have used disposable cameras available at no charge. Allow time prior to your lesson to accumulate enough camera bodies for each student; plan to have 1/3 more than you actually need.

2. eyeglass screwdriver -OR- orange stick (for manicures) -OR- popsicle stick
3. dissection or cafeteria tray

For each student –

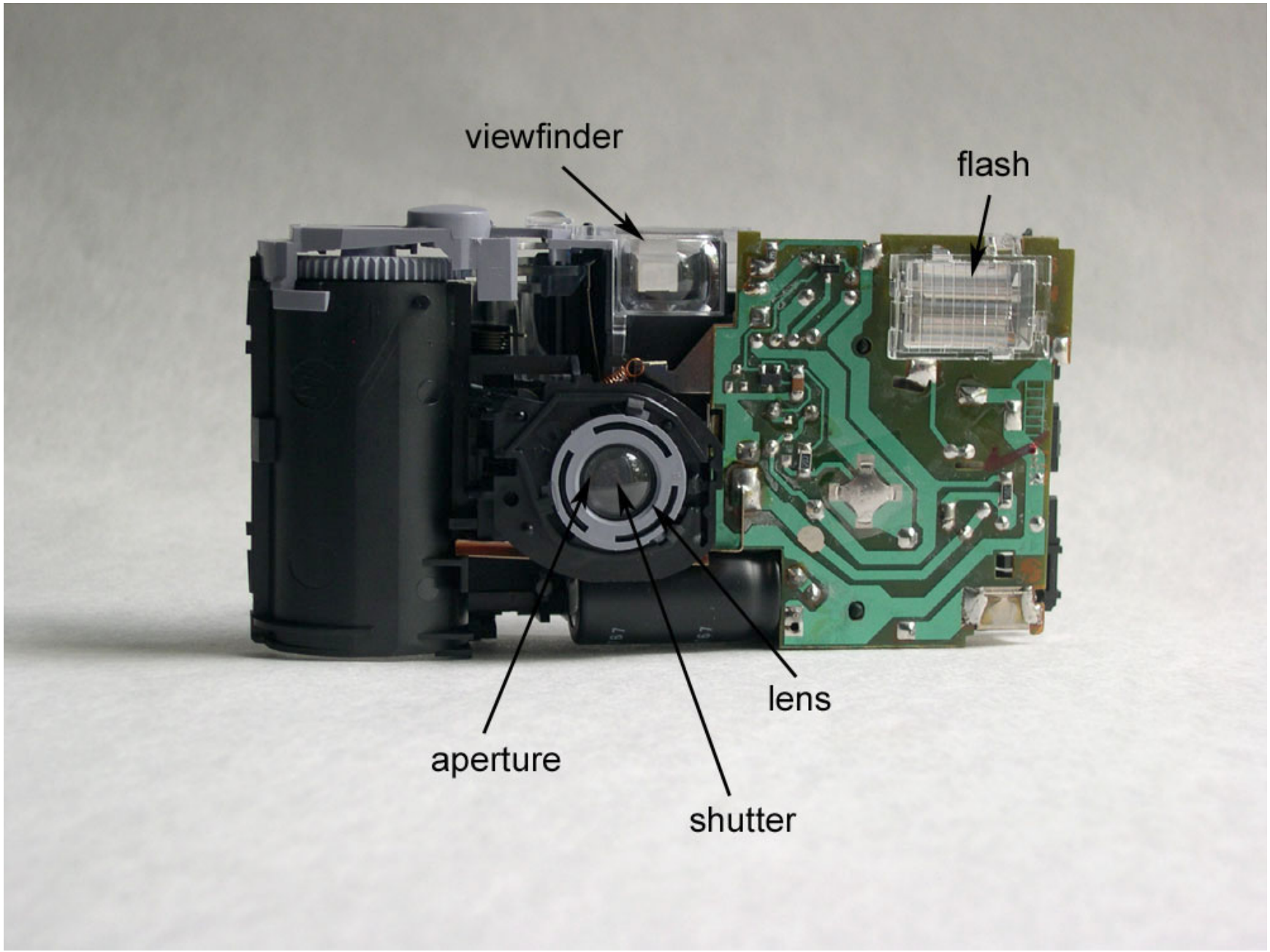
4. rubber or latex gloves
5. safety goggles
6. *How does the Camera Work?* Activity sheet for diagramming front and back of camera.
7. pencil and eraser

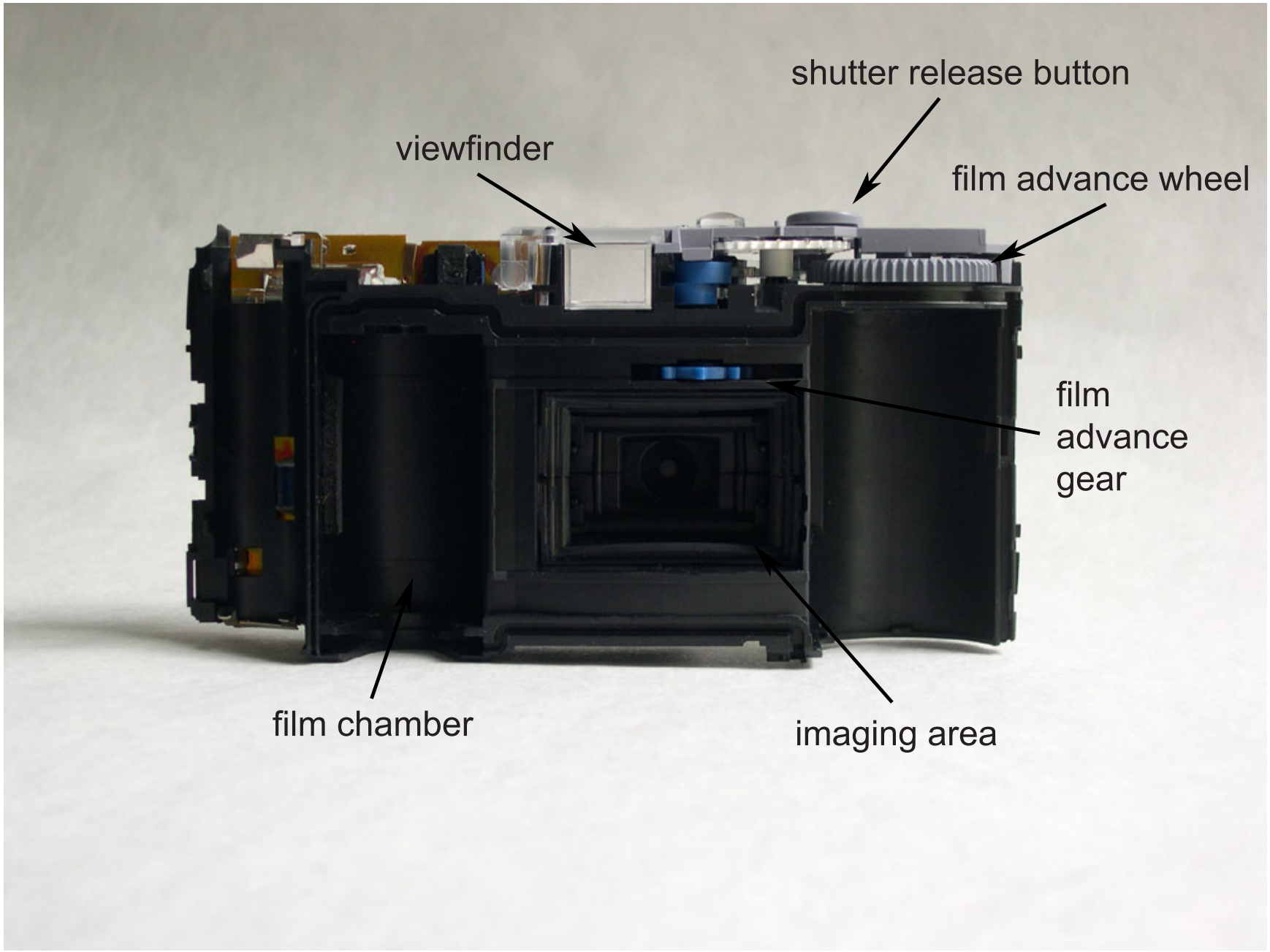
Teacher -

8. rubber handled screwdriver
9. thick rubber gloves
10. 2" x 2' square of heavy gauge aluminum foil (or give each group their own piece of foil)

Important Safety Note:

Like most electronic devices, the disposable camera can be a source for hazardous electric shock. Flash circuit voltage may be as high as 300V when fully charged, and can store up to 50V even after the battery has been removed. Prior to the program, instruct students not to touch the interior circuit board or battery connectors with their hands. If using flash cameras for dissection, the teacher must remove the AA battery from the camera. During the program, we will demonstrate how to short out the circuit board by rubbing it with the square of metal foil, before allowing the students to handle the exposed camera interior. **Do not touch the circuit board with anything other than rubber-gloved hands or a rubber-handled screwdriver when discharging the camera.** If you do not want the students to discharge their own cameras, you may do this part beforehand. **However, the students should still be wearing rubber or latex gloves during the dissection.** The presenter for your lesson will explain this activity during the video conference, but please feel free to contact us, if you have any concerns.


viewfinder
flash
lens
aperture
shutter


shutter release button
viewfinder
film advance wheel
film
advance
gear
film chamber
imaging area

How does a Camera Work?

Disposable Camera Dissection Activity Sheet

Draw the front view of your dissected camera and label the following parts:

lens
viewfinder
flash (if your camera has one!)
aperture
shutter

Now draw the rear view of your dissected camera and label the following parts:

viewfinder
Imaging area
shutter release button
film advance gear
film advance wheel
film chamber

Bonus points! Draw and label the circuit board and flash capacitor on the camera

Disposable Camera Dissection:
interior review sheet

How does it work?

Label the following parts and describe their function:

viewfinder

_____

_____

lens

_____

_____

shutter

_____

_____

shutter button

_____

_____

film advance wheel

_____

_____

film (or focal) plane

_____

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