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Assembly of a Camera

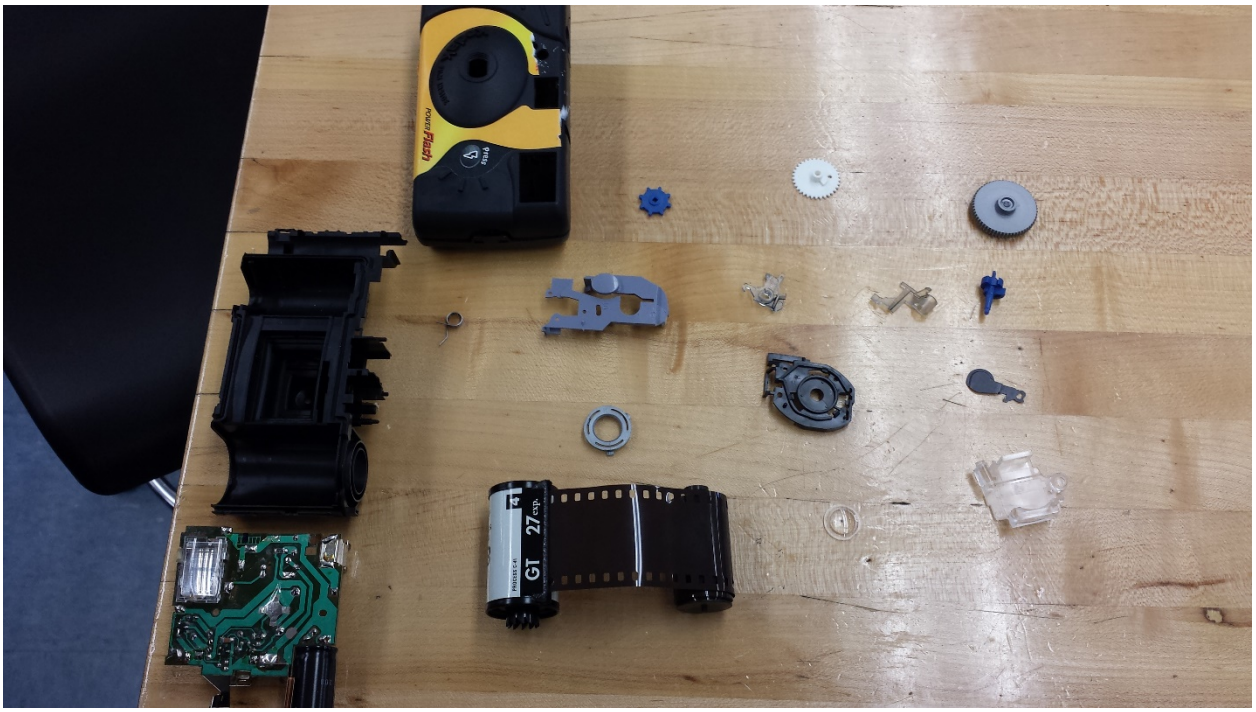
a.


The clear glass is the lens, the grey lever object is the shutter mechanism, and the film is in the Kodak 800 container. The view finder is the plastic object with a slight curve in the middle of it. The film transport has to do with when the shutter mechanism closes and transports the image to the film. The electronic flash is the little button on the outside of the camera, and when it is pressed it allows the light on the circuit board to light up. The energy cell is located on the circuit board (the green object) and it gives power to the electronic flash. The outer housing shell is the basic look to the camera and has a flash button on the outside, as well as the button to take a picture. It is the large grey frame in the picture. The internal frame is the black object with two cylindrical spaces in it.

b. The lens allows the user of the camera to see what the person is taking a picture of. It refracts light in order to do this process. The shutter mechanism closes to cut off light going into the lens, this lets the user to know the picture has been taken. Film is where the "pictures" are stored until they are processed at an appropriate location, and after the shutter mechanism goes off the picture is stored on the film. The viewfinder allows a person to see what they are taking a picture of. The film transport essentially transports the picture to the film itself. The flash allows the user to take a picture in a dark area if desired. The energy cell gives power to the electronic flash, so without it, it would be impossible to have a flash to the camera. The housing shell is the basic look to the camera and has the button for taking a picture, as well as the flash button. Finally, the internal frame contains all the mechanisms that make the camera work after a picture has been taken.

c. The materials used for the parts include plastics, metals, and a bit of glass. The assembly procedure of a camera in combining all of the mechanisms within the internal frame of the camera in order for it to successfully work. The outer frame is then applied to the inner frame so that is how the camera naturally works. The disassembly procedure is

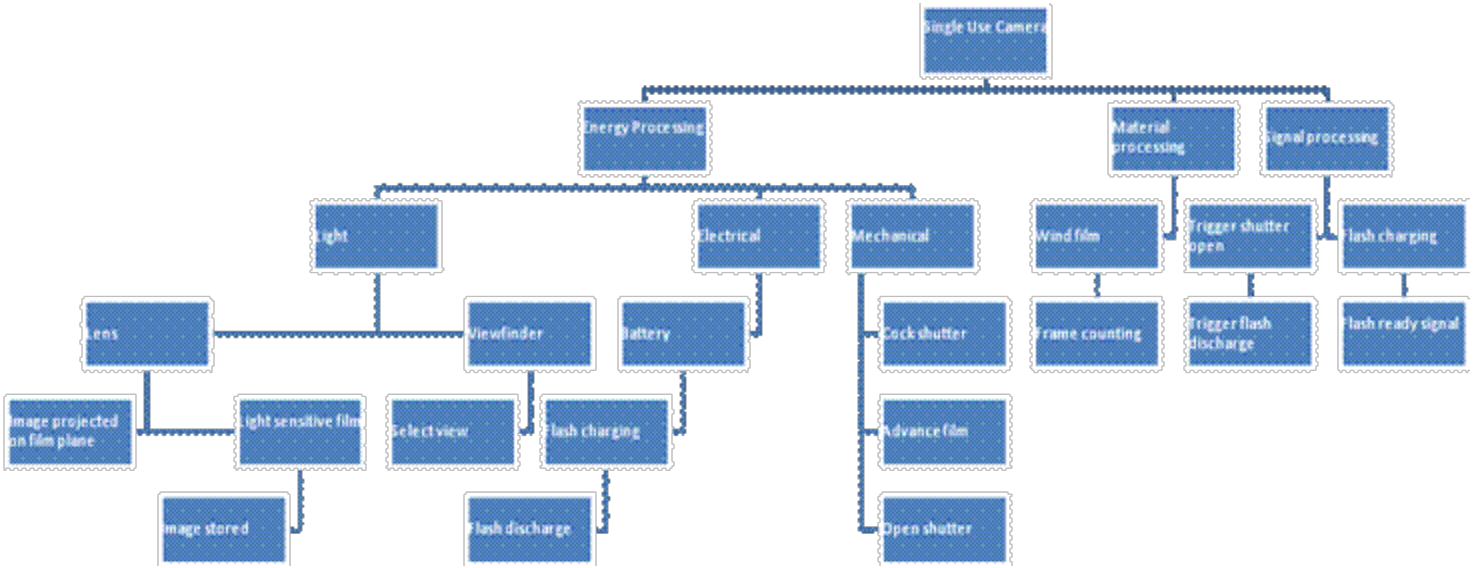
taking off the outer frame to take a look at the inside. First there is the film, then on the other side is where all of the mechanisms and the circuit board are located. The battery is located at the top of the camera, and it can be seen almost immediately after the outer frame is taken off.

d. 


The parts are arranged by row in that the gears are in a row together to show how they work with each other to produce film. The while gear specifically shows how many pictures are left on the film. In the middle two rows the parts are mainly for after the picture has been taken. The parts work together to produce a picture and to transport it to the film. The bottom row is where the lens, viewfinder, and film are located and those are together because the lens allows light in to take a picture, the viewfinder allows a person to see an object, and the film is where the pictures are located. On the left-most column, are the frames and the circuit board.

e. The plastic of the Kodak camera is recycled as well as the film canister into more Kodak cameras. The steel is sent to steel mills in order to be recycled into new materials. It is packaged in recycled cardboard. The plastic from the spools can be made into new material such as sheet lifters for notebooks.

f.


Single Use Camera
Energy Processing
Material processing
Signal processing
Light
Electrical
Mechanical
Wind film
Trigger shutter open
Flash charging
Lens
Viewfinder
Battery
Cock shutter
Frame counting
Trigger flash discharge
Flash ready signal
Image projected on film plane
Light sensitive film
Select view
Flash charging
Advance film
Image stored
Flash discharge
Open shutter

Sources

http://www.personal.psu.edu/msm320/Group%20Webpage/Camera_files/image002.gif\
http://www.kodak.com/global/en/service/faqs/faq5022.shtml
http://www.phogulum.com/wp-content/uploads/disposable-kodak-camera-parts.jpg