

Functional Components:

- Plastic packaging and cardboard sleeve – protects the camera before it is used.
- Plastic camera casing – 2 molded plastic half shells are snapped together to protect the interior components of the camera.
- Circuit Board – plastic board with metal contacts that relays electrical signals between electronic components such as the flash.
- Mechanical Parts- There are many small mechanical cogs, levers, and springs that open and close the shutters.
- Film – Housed in a lightproof canister inside the camera and is what the image is created on when exposed to light.
- Battery – AA battery is unreplaceable and is housed inside the camera. The battery powers the flash unit.
- Viewfinder -allows the user to compose the photograph.
- Trigger Button – Operates shutter release.
- Lens assembly - holds in place a wide angle lens.
- Shutter - normally covers the lens, but it briefly pulled aside to expose the film, when the trigger has been pressed.
- Saw-tooth knob – plastic wheel that advances the film.

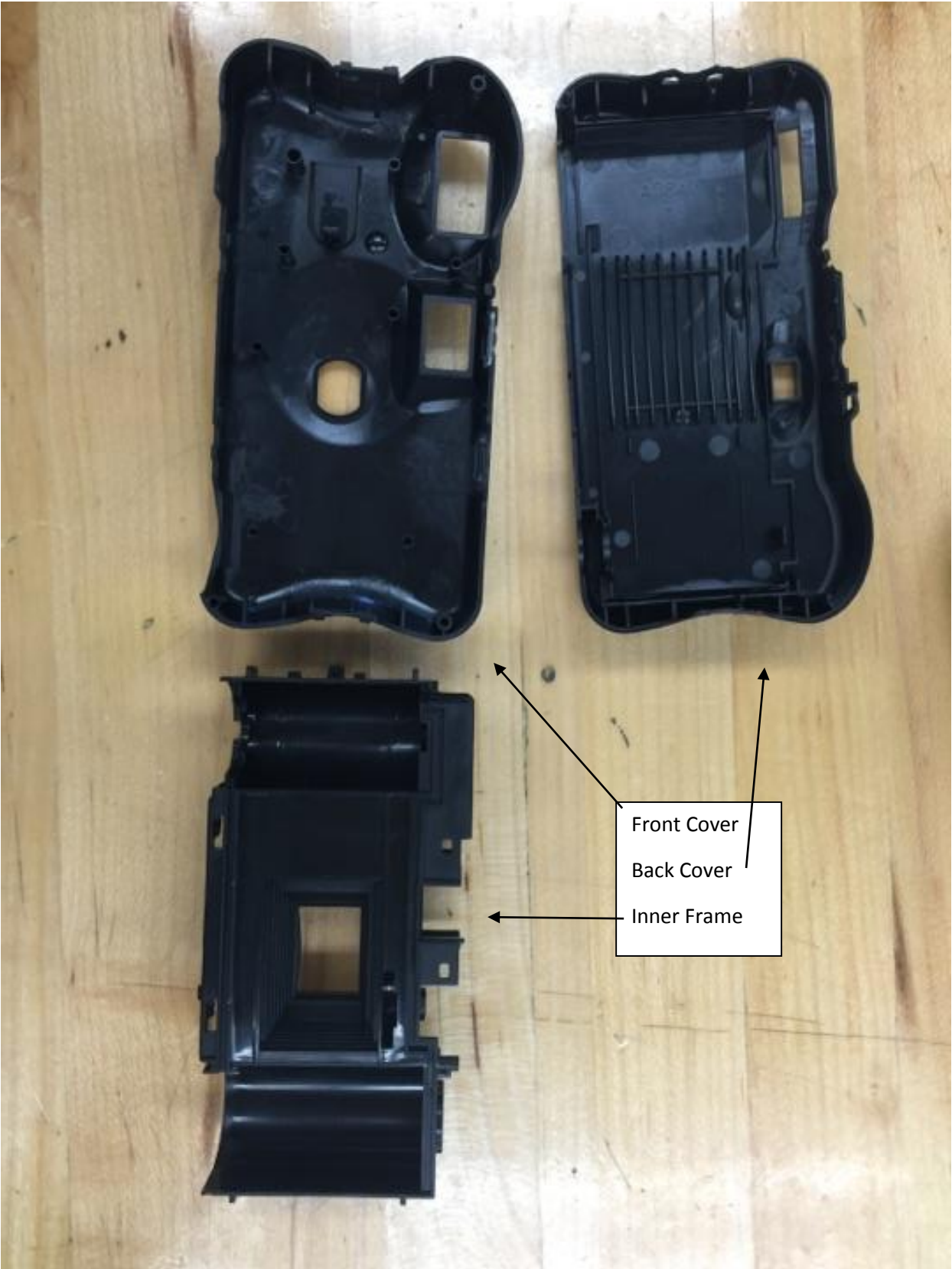
Camera Materials:

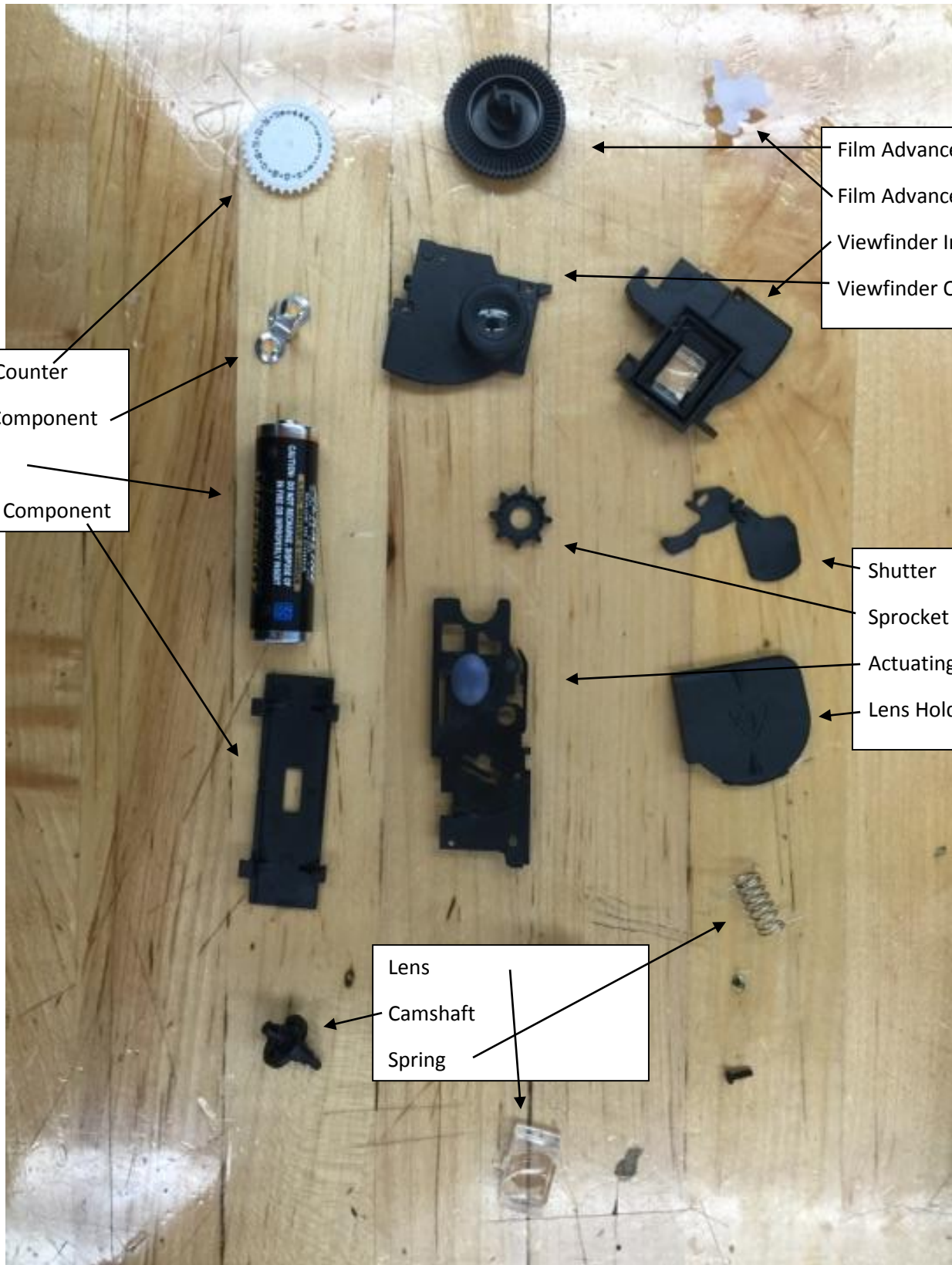
The camera itself is made entirely of metal and plastic so that the majority of it can be recycled multiple times. The camera is also assembled so that the user can not disassemble it and damage the film inside. The camera must be taken apart with tools.

Protective Cardboard Packaging

Packaging





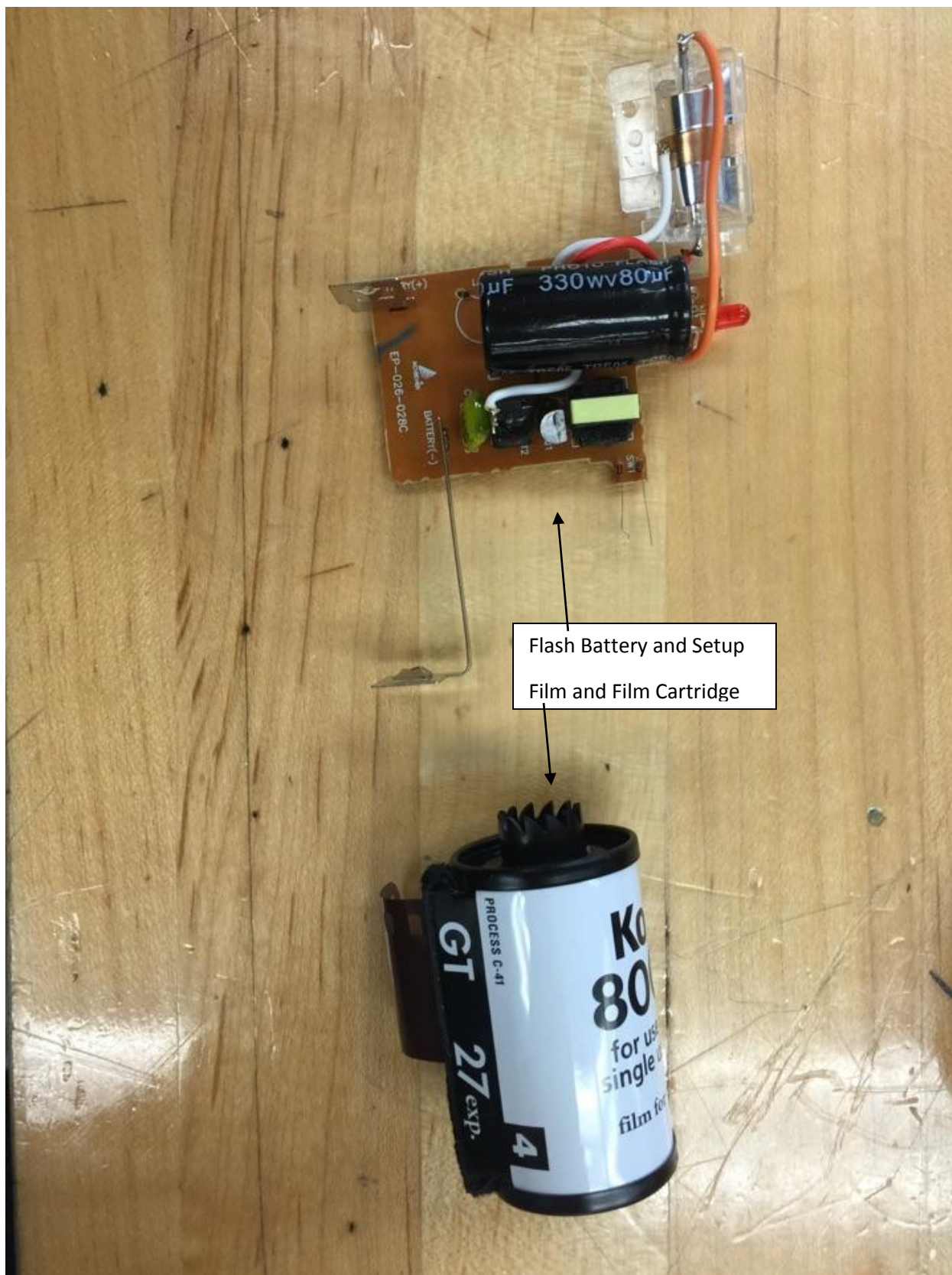


Frame Counter
Metal Component
Battery
Battery Component

Film Advance Gear
Film Advance Lock
Viewfinder Inside
Viewfinder Outside

Shutter
Sprocket
Actuating Button
Lens Holder

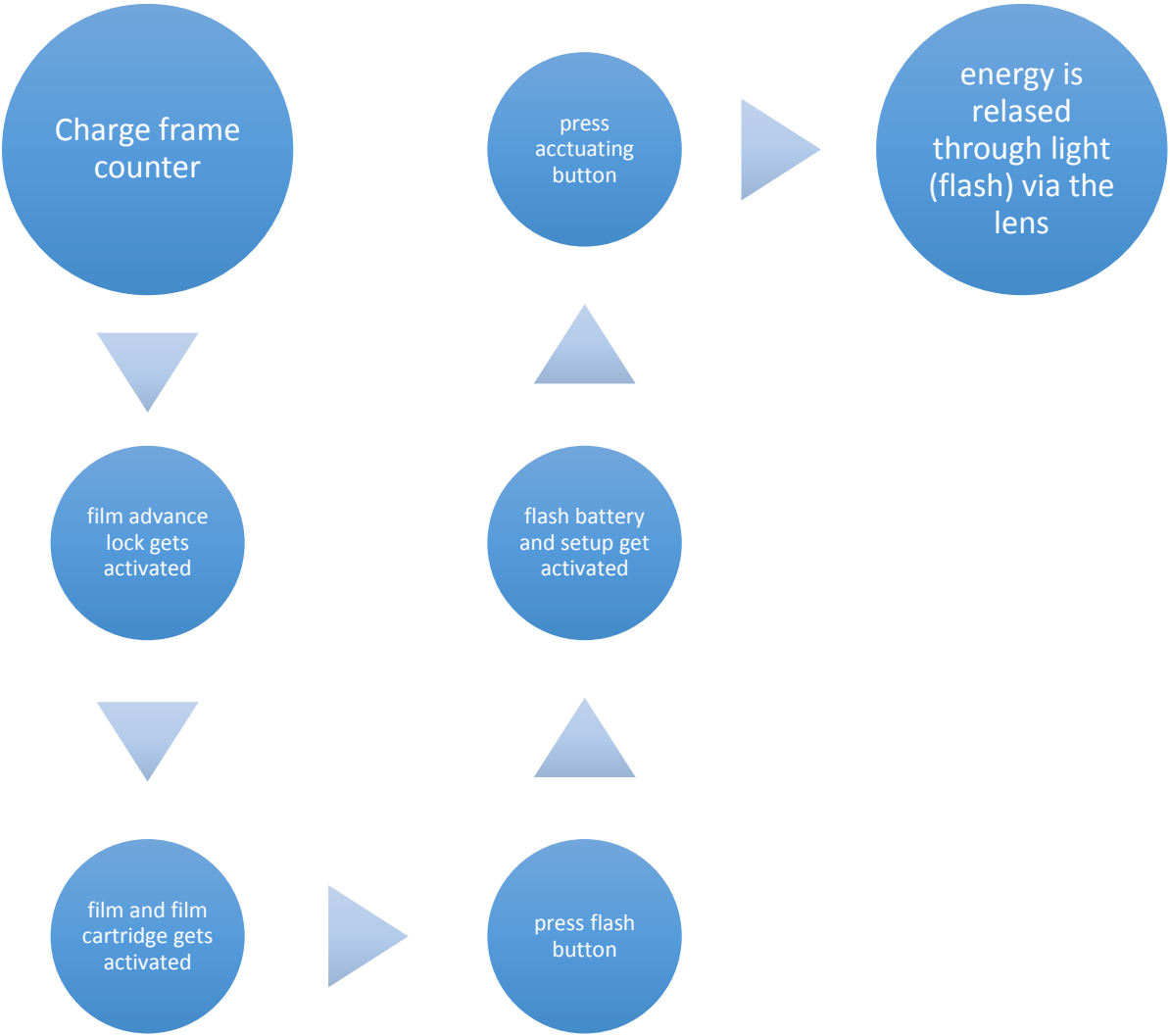
Lens
Camshaft
Spring



Functional decomposition diagram



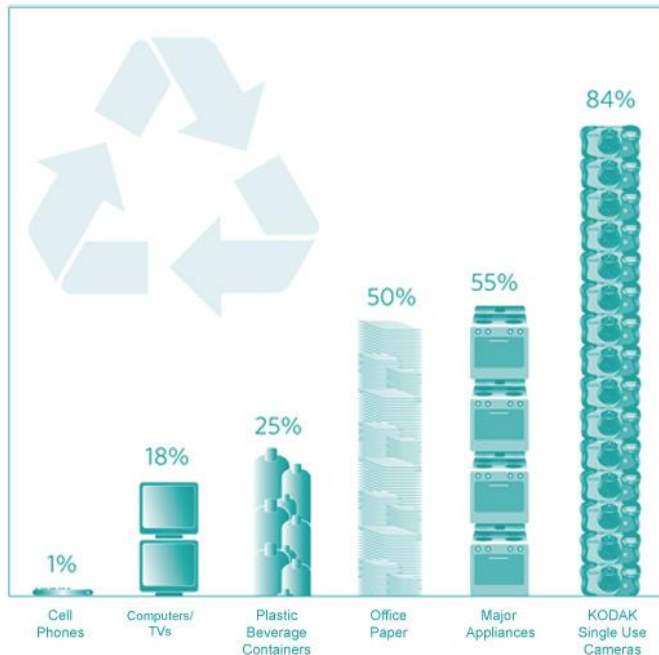
Process flow chart



Facts and opinions: Recycling of the Kodak camera

Did you know Kodak has a recycling program exclusive for its reusable cameras? This program was so successful that around the 1.5 billion cameras recycled per year, one third of them were Kodak brand.

Percentage of different products recycled in 2008
(U.S. Rates)



"We're excited to remain a leading champion of recycling in the U.S. and beyond with this program that is now in its 19th year,

Even in this digital age, there continues to be strong demand for one-time use cameras, and we're continuing to meet this demand in an environmentally responsible manner."

- Joel Proegler, general manager,
Film Capture and vice president, Film, Photofinishing & Entertainment Group

Now, what's recycled and what's not? As it is stated in Kodak's website, "internal parts in good condition are put into new Single Use Cameras, while the rest of the camera, such as the plastic outer casing, is ground and recycled." Moreover, not everything is recycled. Therefore, in order to reduce waste I suggest the redesign of the packaging. This is one of the most significant wastes given that the packaging itself is made out of a mix of aluminum and plastic. I understand that it is for the wellbeing of the camera. However, I believe that if we separate the material, cover the camera with an aluminum paper, and then another layer of plastic, we will be able to recycle both materials.

Source: http://www.kodak.com/eknec/PageQuerier.jhtml?pq-path=4213&pq-locale=en_US