The Lifecycle and Functions of a Disposable Camera

The Funsaver disposable camera by Kodak is composed of many parts that are necessary to ensure the function of the camera. The outer and inner casing of the camera protects the sensitive internal parts from damage. The casing consists of the front half of the shell, the back half of the shell, the internal skeleton, the battery port cover, and the film port cover. The front shell is a black plastic cover with openings perfectly sized for the lens, viewfinder, and flash to fit through. The back half of the shell is a black plastic cover that has a matching opening so the viewfinder can be accessed by the front and back of the camera. The back shell also has an opening for the film gears so the user can take a picture, and then shift the film so the picture is preserved and the camera is ready to take the next image. The internal skeleton fits inside the two outer shells. Its purpose is to hold the inner workings of the camera in place, and protect them from damage if the camera is handled roughly. The three casings also work together to ensure the functional components of the camera are protected from sunlight, water damage, and the other elements. The battery port cover keeps the battery in place so the camera has the energy to emit a flash. The film port cover is important for keeping the film spool secure and protected.

The camera requires mechanical components to take the picture. The film spool is wrapped around the film winding gear so that, as the gear is turned, a slide of film can be exposed to take the picture, and then wrapped into the spool for developing the picture. The spring works with the button that is pushed to take the photograph. When the top button is
pushed, the button frame opens and closes the shutter for a split second so the picture is captured. The other screws and plastic components ensure that the mechanical pieces are held together in the proper places to ensure the camera is working soundly.

The flash circuit board and the battery are responsible for the camera flash, which makes taking pictures possible at night. The battery is also a chemical component of the camera. Another chemical component of the camera is the actual camera film. The chemicals on the film react when exposed to light and capture the pictures. The film goes through a chemical process after the camera is recycled, where the film is used to create physical prints of the photographs captured.

Optical parts are necessary for the user to take a photo. The small and large viewfinder lenses allow the user to focus on the image he wishes to take, and view how the photo will appear before it is actually taken. The camera lens is the opening where the light is focused through, and it is responsible for capturing the photo. All components of the camera are necessary to create a properly functioning and marketable product.
The following components of the disposable camera work to physically capture the image on the film:

**Casing**
- Front half of shell
- Rear half of shell
- Internal skeleton
- Battery port cover
- Film port cover

**Mechanical**
- Film spool
- Film winding gear
- Numbered gear
- Shutter
- Large spring
- Small spring
- Button frame
- Miscellaneous Plastic Components
- Screws

**Electrical**
- Flash circuit board

**Chemical**
- Film
- AA Battery

**Optical**
- Viewfinder, large lens
- Viewfinder, small lens
- Aperture frame
- Photographic lens
Assembly, disassembly, and recycling a single-use camera

The lifecycle of a single-use camera is frequently assessed to evaluate their overall environmental impact. Over the past two decades of their existence in the market, single use cameras have been engineered to be lighter, more durable, more reusable, and more recyclable. This has reduced the carbon footprint of camera manufacturing immensely up until the introduction of the digital camera.

First of all, the camera must be designed with its functionality, as well as its recyclability in mind. They must be improved to keep up with customer demand and they also must able to compete in the market for cameras (i.e. when other camera’s develop flash capabilities, so must the single-use camera).

Their polystyrene components, such as the shells, are 100% recyclable because they can be melted down and casted into new components. The flash assembly can be removed, tested, and placed in new cameras and the batteries can either be tested and reused, or donated after their initial use. The rear half of shell and the front half of shell are recycled 3 or more times as well as the mechanical parts (depending on their damage). The flash circuit board are recycled 9-11 times and the 1.5V AA -cell battery can also be recycled.

Overall, with reusable components comprising 90% of the camera and recovering the other 10% as materials means that the camera can go a long way while bypassing the landfills and successfully developing the films for the customer. The mechanical components and the materials made of plastic are the ones that are mostly reused.