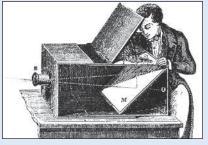


The history of the camera

The history of cameras that takes you from early op cal devices all the way through to modern digital mirrorless cameras

he word camera comes from the Latin words camera obscura, which mean 'dark chamber.'



► The ancient Greeks and Chinese used an optical device called the 'camera obscura' to project an image of the surroundings on to a screen. This invention played an important role in the development of cameras and photography.



► 1814 Joseph Nicéphore Niépce achives the first photographic image using a camera obscura.



► 1837 **Louis Daguerre**, the father of photography introduces the daguerreotype, a fixed image that did not fade.

► The 'Kodak' Brownie camera was developed by George Eastman and went on sale in 1888, pioneering the use of photographic film.

It was simple box camera with a single shutter speed and fixed focus lens.



Around the year 1913, a German optical engineer named Oskar Barnack made a prototype compact camera that used 35 mm film. Named 'Leica', it was put into production in 1925 after further developments.



► Twin reflex cameras became popular in the 1920s and 1930s. These cameras had two lenses, one

through the lens to the film and the other to the viewfinder.



► In 1941, the Single Lens Reflex (SLR) cameras that use a mirror and prism system to allow photographers to accurately see the image that will be were invented. This system uses one optical light path through the lens to the film and to the viewfinder.

▶ Polaroid cameras hit the market in 1948, allowing photographers to produce images instantly. A special chemical process was used to produce prints from the negatives in under a minute.

> ► The first colour photograph: was created in 1961 by **Thomas Sutton.**

► The popularity of instant cameras was in 1965 with the introduction of the Polaroid Model 20

one of the top selling cameras of all time.

The first successful imaging technology using a digital sensor was made in 1969 by Willard S. Boyle and George E. Smith. In 2009, they were awarded the Nobel Prize in Physics for their contributions which paved the way for digital photography.



A traditional SLR camera is a lightproof box. The box contains an aperture, or opening, that lets

light in for a certain amount of time. A part called a shutter opens and closes the aperture. This controls the amount

of light coming into the camera. ►The first commercial



► The first full-frame digital SLR cameras were developed in Japan from around 2000 to 2002.

KODACHROME

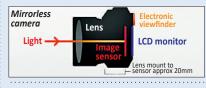
► The digital cameras produce detailed photographs made up of a huge number of pixels and photographs are typically compressed using the JPEG standard and stored on memory cards.

► A digital camera works in a similar way as a traditional camera. However, it captures the image on an electronic chip rather than on film. The chip is a light sensor that turns the image into electric signals. Most digital cameras

have a small screen that displays the image right away. The camera can also store

the image on a memory card. Photographers can transfer the stored image to a computer. This allows them to view, e-mail, or print out the image.

▶ Modern mirrorless cameras. as the name suggests capture the images without the use of a mirror in the camera body. This is different from DSLR cameras, which reflect images into viewfinders via mirrors. Instead, mirrorless cameras often use Electronic Viewfinders (EVF) to display images digitally.



► The technology behind cameras is improving all the time with additions such as touch screens and Electronic Viewfinders.



Source: sciencekids.com. Graphic: Mahil Wijesinghe