

Definition of Photography

Photography:

Photography is the science, art, application and practice of creating durable images by recording light or other electromagnetic radiation, either electronically by means of an image sensor, or chemically by means of a light-sensitive material such as photographic film. It is employed in many fields of science, manufacturing, and business, as well as its more direct uses for art, film and video production, recreational purposes, hobby, and mass communication.



3

Definition of Photography



Photography:

Comes from the Greek word "phōtos" which means light and "graphé" which means "drawing". Together they mean drawing with light.



History of Photography

A **CAMERA** is a device that records images, either as a still photograph or as moving images known as videos or movies.

- A device for taking photographs by letting light from an image fall briefly onto sensitized film, usually by means of a lens-and-shutter mechanism.
- The term camera comes from the word camera obscura (Latin for "dark chamber")
- The modern camera evolved from the camera obscura.

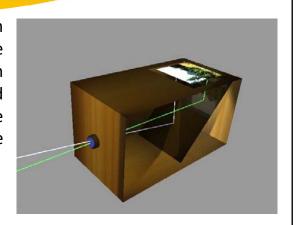


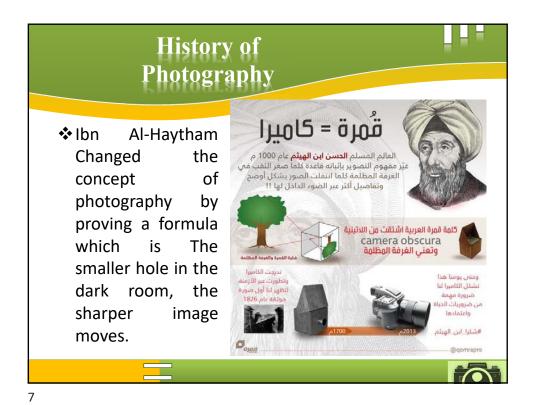


5

History of Photography

❖ Ibn Al-Haytham invented the Camera Obscura in 1000 and explained why the images were upside down.





History of Photography

Al-Haytham's Camera Obscura

Object

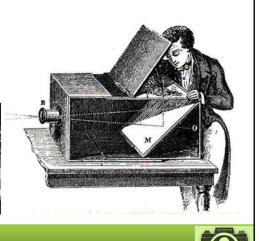
Darkened Room

Pinhole Opening

Inverted, blurry projection

History of Photography

❖ The first camera that was small and portable enough for practical use was built by Johann Zahn in 1685.



9

History of Photography

The first permanent photograph was made in 1826 by French photography Joseph Nicéphore Niépce.





History of Photography

The first colour photograph was made by Scottish physicist James Clerk Maxwell.



11

History of Photography

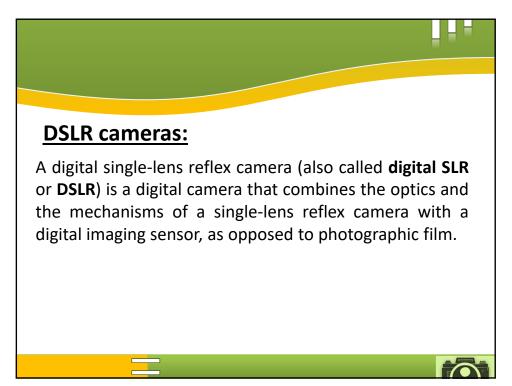
❖ Tartan Ribbon, photograph taken by <u>James Clerk Maxwell</u> in 1861. Considered the first durable colour photographic image, and the very first made by the three-colour method Maxwell first suggested in 1855.



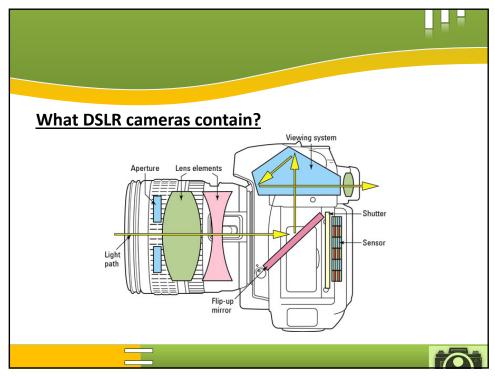
❖ Maxwell had the photographer Thomas Sutton photograph. They used a tartan ribbon three times, each time with a different colour filter (red, green, and blueviolet) over the lens. The three photographs were developed, printed on glass, then projected onto a screen with three different projectors, each equipped with the same colour filter used to photograph it.

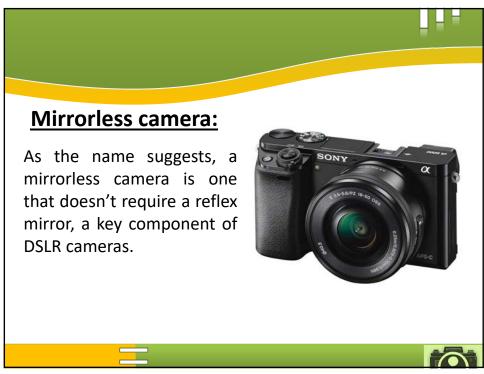


10





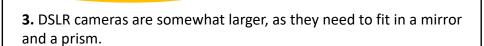




What are the differences and similarities between DSLR and Mirrorless cameras?

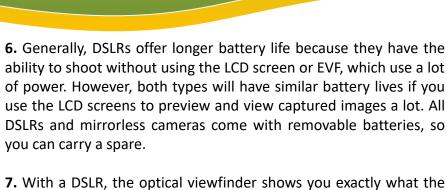
- 1. In a mirrorless camera, there is no optical viewfinder. Instead, the imaging sensor is always exposed to light. This gives you a digital preview of your image either on the rear LCD screen or an electronic viewfinder (EVF).
- 2. Like DSLR cameras, mirrorless cameras use a bayonet-style mount for attaching different lenses.

17



- **4.** Despite the much smaller form factor compared to DSLR cameras, mirrorless cameras can have the same size sensors inside.
- **5.** Both camera types can shoot at very fast shutter speeds and capture a lot of images quickly, but the lack of a mirror makes it easier to take image after image. The simpler mechanics of mirrorless cameras allow them to shoot more photos per second, at higher shutter speeds.

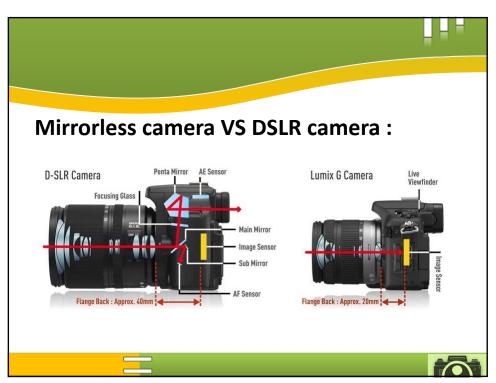


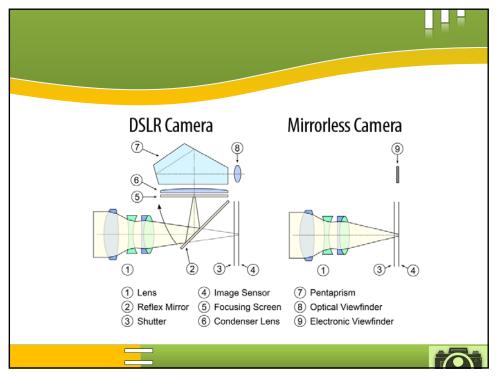


camera will capture. With a mirrorless camera, you get a preview of the image on-screen. Some mirrorless cameras offer an electronic viewfinder that simulates the optical viewfinder.

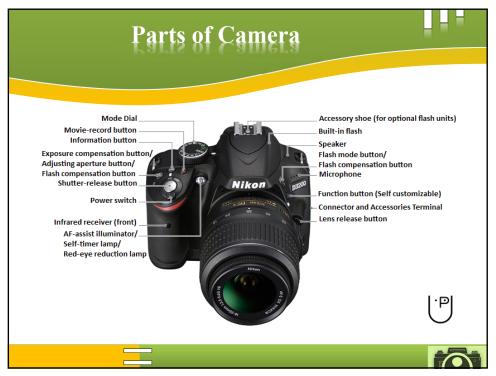


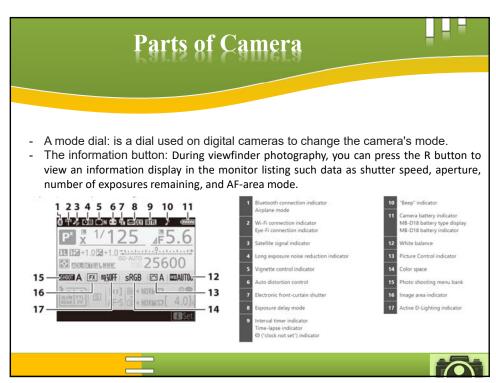
19

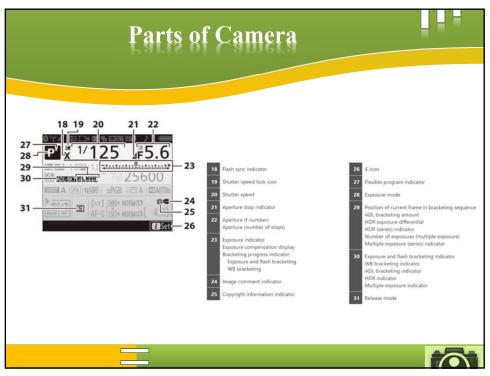


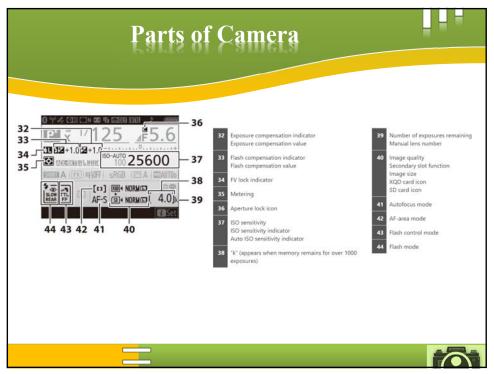












Parts of Camera



- **-Exposure compensation button** is the button you press to change the exposure compensation.
- **-Flash exposure compensation** is used to compensate for the flash output when the flash is used in Auto or TTL mode.
- **-The shutter-release button** is a push-button found on many cameras, used to record photographs.
- -A thermographic camera also called an **infrared camera** is a device that forms an image using visible light.
- AF-assist illuminator lights to assist the focus operation when lighting is poor.



27

Parts of Camera



- **-Self-timer lamp:** Some lighting statuses of the camera status lamp show that it is when the self-timer is effective.
- **-The Fn (Function) button** is a customizable button that allows quick access to predetermined menu options. The Fn button options available are common menu items that are accessed frequently.



