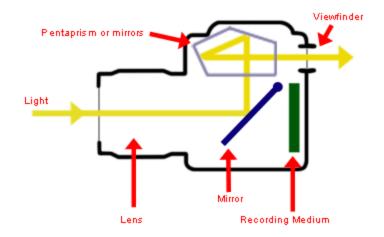
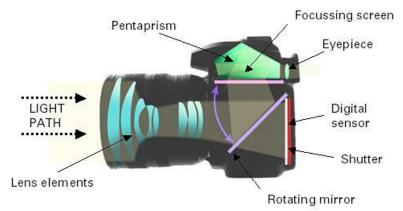
## **SLR Cameras**

The single lens reflex (SLR) uses an automatic moving mirror system which permits the photographer to see exactly what will be captured by the film or digital imaging system and is most folks' idea of a serious camera. SLR means that the same lens is being used for viewing and as well as taking pictures. A The mirror in the body directs the light from the lens right up into a prism for viewing, and then flips up out of the way just before an exposure is made.



When you press the shutter to take a picture the mirror comes up, the light passed through to the shutter, which opened to expose one frame of the film. Digital SLR camera's works in almost the same way. The only difference being that instead of a piece of film behind the shutter there is an electronic sensor.

With the digital SLR you have fairly good idea of what you're going to capture by looking right through the viewfinder. When you press the shutter release, the camera captures the image instantly. If you need to zoom or focus manually there are large rings that you can operate quickly by just a feel.



The mirror and the optical viewfinder are what that enables a photographer to frame images more quickly and accurately than with a point-and-shoot camera. Regardless of what lens or filters you have attached to the camera you will see what the sensor will see. The typical SLR camera viewfinder offers additional information underneath the image, including all the most important camera settings.

SLR advantages: (1) accurate, large, and bright optical viewfinder, (2) fast operation and large controls, (3)

excellent image quality in low "available" light situations when it is necessary to use higher ISO speeds, (4) interchangeable lenses.

The SLR is much larger and heavier than the traditional point-and-shoot camera. But if you are heading out specifically with a photographic project in mind you will appreciate how the SLR and its controls fit into your hands.

The photographic single-lens reflex camera (SLR) was invented in 1861 by Thomas Sutton, a photography author and camera inventor who ran a photography related company together with Louis Désiré Blanquart-Evrard on Jersey. Only a few of his SLR's were made. The first production SLR with a brand name was Calvin Rae Smith's Monocular Duplex (USA, 1884). Other early SLR cameras were constructed for example by Louis van Neck (Belgium, 1889), Thomas Rudolphus Dallmeyer (England, 1894) and Max Steckelmann (Germany, 1896), and Graflex of the United States and Konishi in Japan produced SLR cameras as early as 1898 and 1907 respectively. These first SLRs were large format cameras. While SLR cameras were not very popular at the time, they proved useful for some work. These cameras were used at waist level; the ground glass screen was viewed directly, using a large hood to keep out extraneous light. In most cases, the mirror had to be raised manually as a separate operation before the shutter could be operated.

Following camera technology in general, SLR cameras became available in smaller and smaller sizes; medium format SLRs soon became common; at first larger box cameras, and later "pocketable" models such as the Ihagee Vest-Pocket Exakta of 1933.

The first 35mm prototype SLR was the Soviet Union's  $C\pi opt$  ("Sport") Prototyped in 1934, it was a very smart design with a 24mm  $\times$  36mm frame size, but did not enter the market until 1937. Therefore, it cannot be claimed as the first 35mm SLR.



The real first 35mm format SLR was the Ihagee Kine Exakta, produced in 1936 in Germany, which was fundamentally a scaled-down Vest-Pocket Exakta. This camera used a waist-level finder.



Early 35 mm SLR cameras had similar functionality to larger models, with a waist-level ground-glass viewfinder and a mirror which remained in the taking position—blacking out the viewfinder—after an exposure, returning when the film was wound on. Innovations which transformed the SLR were the pentaprism eye-level viewfinder and the instant-return mirror—the mirror flipped briefly up during exposure, immediately returning to the viewfinding position. The half-silvered fixed pellicle mirror, without even the brief blackout of the instant-return mirror, was innovative but did not become standard. Through-the-lens light-metering was an another important advancement.

Answer the following questions and underline where the answers are found in the reading. Do a goggle image search and find 20 examples of different styles and brands of SLR camera's, print a contact sheet and turn in with reading..

- 1. What does the SLR permit the Photographer to do?
- 2. What does SLR stand for?
- 3. What is the difference between the SLR Film camera and the SLR Digital Camera?
- 4. What is an advantage of the SLR orver a point and shoot camera?
- 5. Name some SLR advantages?
- 6. Who invented the SLR and what and what format was it?
- 7. Who created the first Prototype 35mm SLR?
- 8. What was the first real 35 mm SLR?