Cathode Rays:

Cathode rays are streams of fast moving electrons, discovered by Sir William Crooke

They can be produced by using a discharge tube containing gas at a low pressure of the order of 10^{-2}mm of Hg.

The cathode rays in the discharge tube are the electrons produced due to ionization of gas and that emitted by cathode due to collision of positive ions.

Cathode rays travel in straight lines.

Cathode rays are emitted normally from the cathode surface. Their direction is independent of the position of the anode.

Cathode rays exert mechanical force on the objects they strike & produces heat when they strikes a metal surface.

Cathode rays may be fluorescence.

When cathode rays strike a solid object, specially a metal of high atomic weight and high melting point X-rays are emitted from the objects.

Cathode rays are deflected by an electric field and also by a magnetic field.

These rays ionize the gases through which they are passed & can penetrate through thin foils of metal.

Cathode rays are found to have velocity ranging $\frac{1}{30}$th to $\frac{1}{10}$th of velocity of light.