

A photon is a quantum of electromagnetic radiation.

Planck Constant:  
 $6.63 \times 10^{-34} \text{ Js}$

## Photoelectric Effect

$$E = h \times f$$

$$f = \frac{v}{\lambda}$$

$$\text{Intensity} = \left( \frac{N}{t} \right) \left( \frac{E}{A} \right)$$

Intensity  $\propto$  Current

$$\frac{1}{2} m v_{\max}^2 = hf - \phi$$

Work Function Energy  
 $\rightarrow$  Threshold Frequency