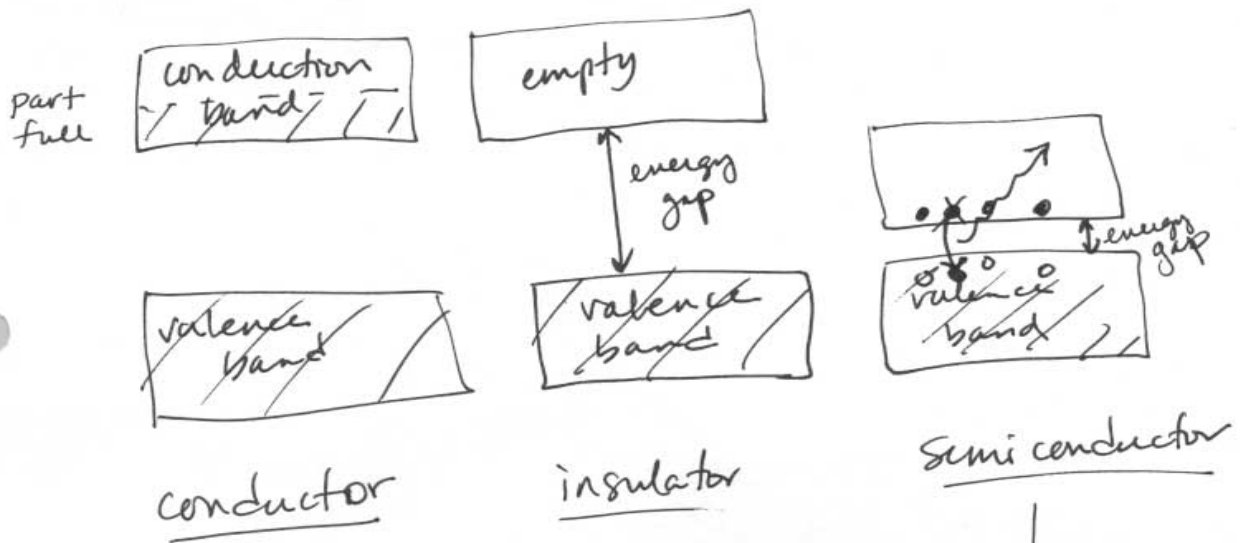


# Band model of Conductors, Insulators, Semi-conductors



also like a simplified LED  
model :

$$E_{\text{photon}} = \frac{hc}{\lambda} \geq E_{\text{gap}}$$