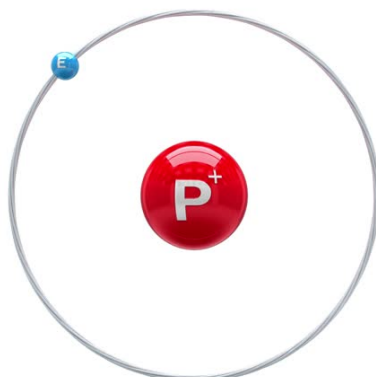
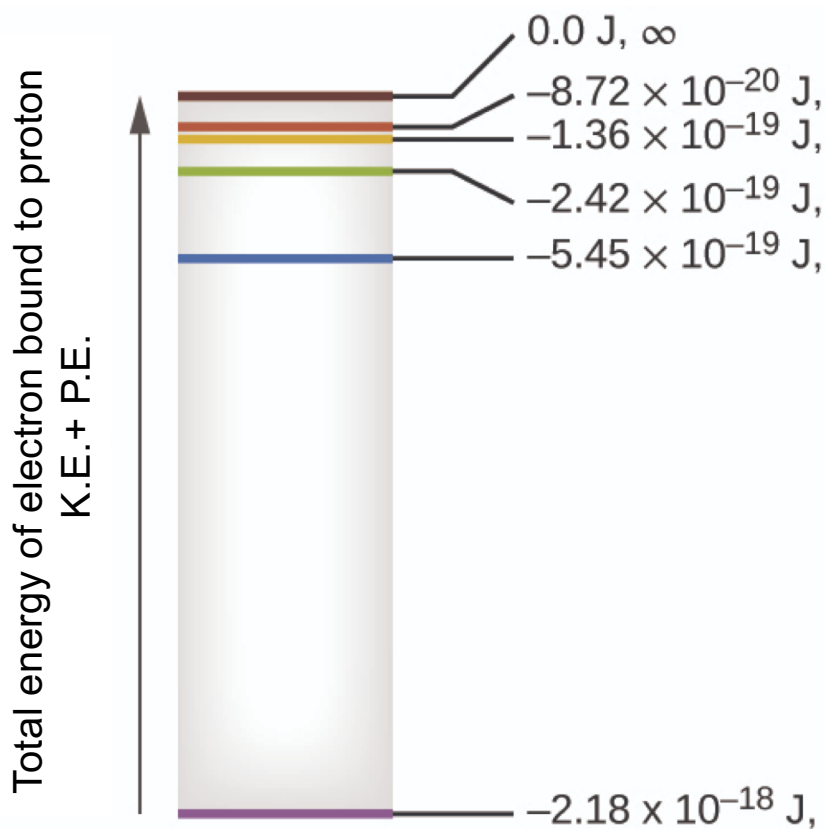


# Hydrogen atom



**Figure 1.** Cartoon drawing of a hydrogen atom. The drawing is not to scale. The drawing does not respect to the wave-like nature of matter.



**Figure 2.** The first 5 discrete energies (horizontal lines) that an electron can have when it is bound to a proton. “Zero energy” means the electron is free to move away from the proton. The discrete energies are calculated by finding electron wavefunctions that satisfy the Schrodinger Eqn (PDE) and the boundary condition (electron wavefunctions must go to zero at large distance).