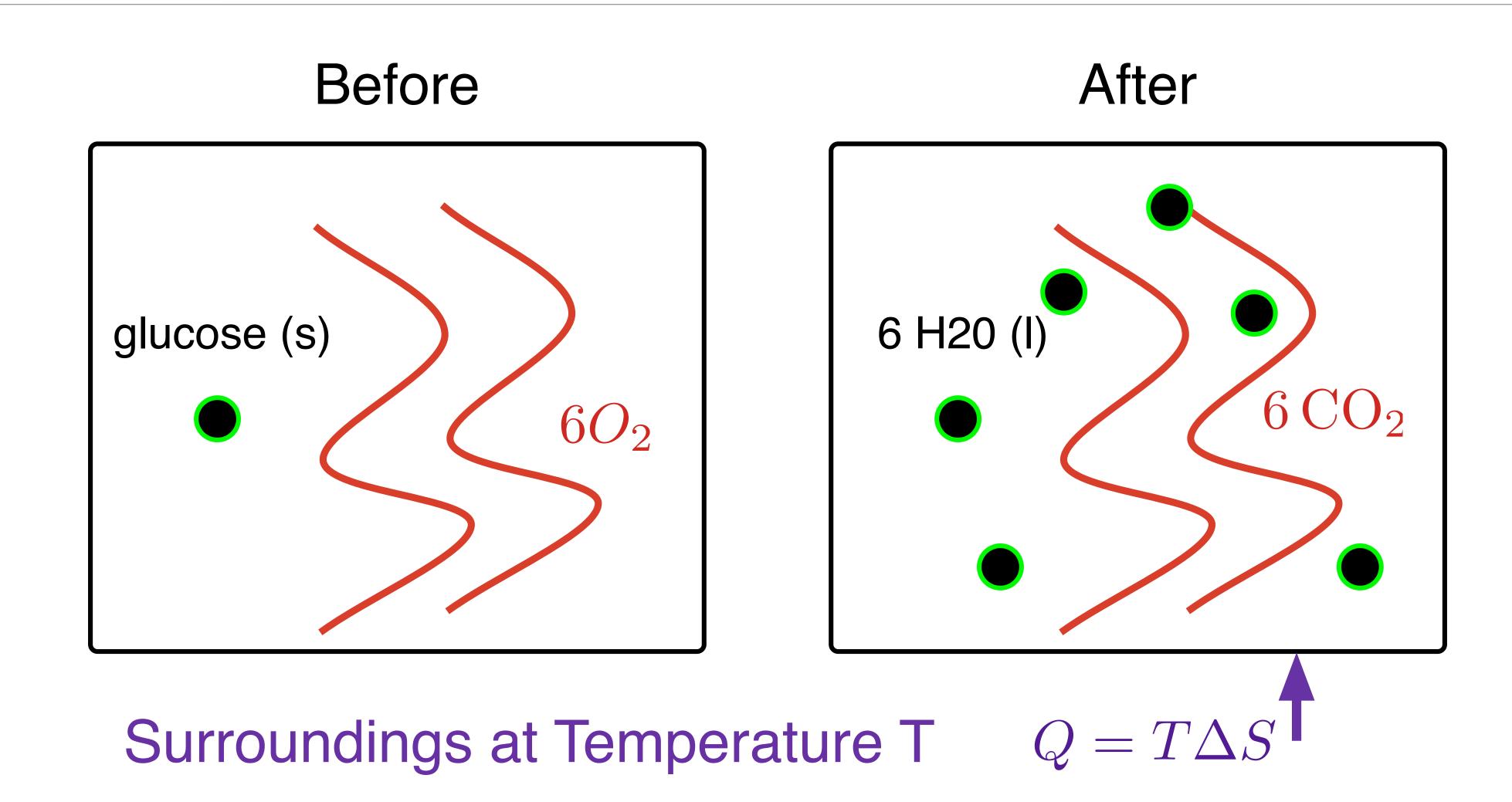
Oxidation of Glucose Cartoon



Maxwell Relations

$$\left(\frac{\partial T}{\partial V}\right)_{S} = -\left(\frac{\partial p}{\partial S}\right)_{V}
\left(\frac{\partial T}{\partial p}\right)_{S} = \left(\frac{\partial V}{\partial S}\right)_{p}
\left(\frac{\partial S}{\partial V}\right)_{T} = \left(\frac{\partial p}{\partial T}\right)_{V}
\left(\frac{\partial S}{\partial p}\right)_{T} = -\left(\frac{\partial V}{\partial T}\right)_{p}$$

Energy, E(S, V)

Enthalpy, H(S, p)

Free Energy, F(T, V)

Gibbs Free Energy G(T, P)