**Energy and Energy Balances**

**Energy Balance for Closed Systems**

Final system energy – initial system energy = net energy flow in to or out from the system:

(Uf-Ui) + (KEf-KEi) +(PEf-PEi) = Q + W

ΔU + ΔEK + ΔEP = Q + W

**Energy Balance for Open Systems**

+ = Δ+ Δ+ Δ

Solve the following equations:

