

Study Guide for Chapter 2

- 1) What is first law?
- 2) Reversible PV work = $-\int P dv$
maximum work?
- 3) Definition of C_p , C_v
Relation C_p , C_v for ideal gas, liquid, solid
- 4) Enthalpy: $H = U + PV$
 $P = \text{const}$: $\Delta Q_p = \Delta H$; $V = \text{const}$: $\Delta Q_v = \Delta U$
- 5) Hess law
Example in book: glucose \rightarrow maltose, $\Delta H = ?$
- 6) Calculate ΔU , ΔH , Q for ideal gas processes,
Isothermal, adiabatic, constant V, T ; constant P, T