Entropy

- the tendency for matter to be disorderly (unless work is put into a system)

spontaneous reaction → release free energy

free energy - available to do work

high energy → low energy releases free energy

Gibbs Free Energy Equation

$$\Delta G = \Delta H - T\Delta S$$

- ΔG ↑ free energy
- ΔH ↑ enthalpy
- T ↑ Temp
- ΔS ↑ entropy

$-\Delta H$ → exothermic release free energy

$+\Delta S$ → more chaos release free energy

$-\Delta G$ = released free energy

*table on page 571 → copy! (How enthalpy + entropy influence spontaneity)

Increase Entropy

S → L → G

Divide something into parts (solution)

Increase # molecules (decomp rxns)

Increase temperature

Read 18.4 - take notes using this format:

Vocab/ key terms	notes ↙	your commentary -thoughts -short cuts (wiggle more) -questions