

Today Nov 9: lattice energy, review, entropy?

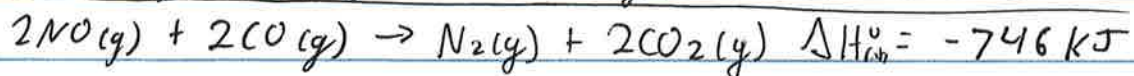
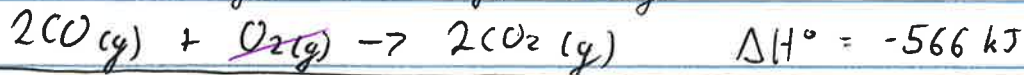
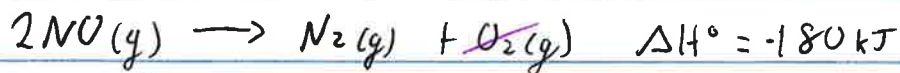
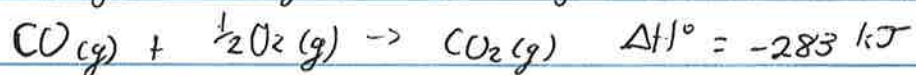
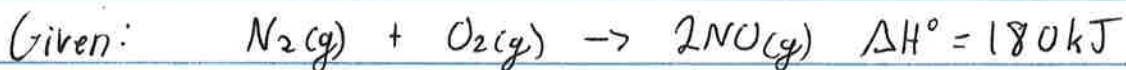
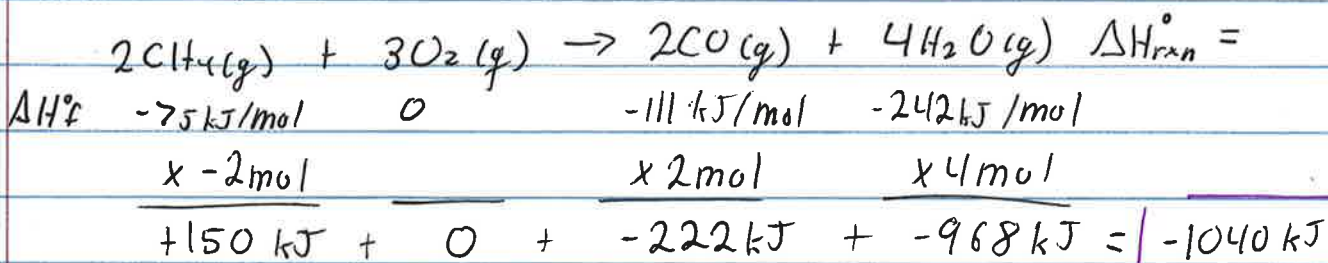
Sunday Nov 11: problem club with Al

Monday Nov 12: CKY, doors open at 7:45

Balance equation:

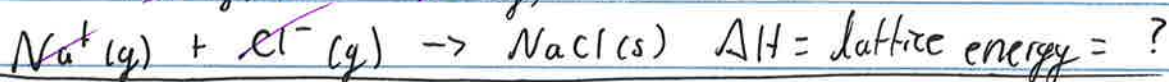
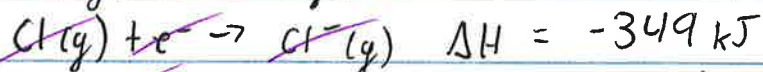
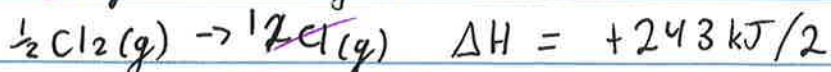
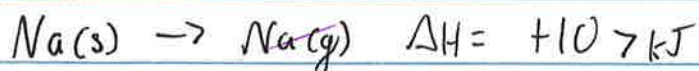


What is $\Delta H_{\text{rxn}}^\circ$?



Lattice energy





$$107 + 496 + 243 - 349 + x = -411$$

$$x = -787 = \text{lattice energy}$$

Intermolecular forces

- LDF \propto MM 1-10 kJ/mol
 - \hookrightarrow if MM > 300 it is a solid
- Dipole-dipole forces 3-4 kJ/mol
 - polar molecules - look for E groups in AB_E formula
 - sometimes with no E groups, the molecule may be polar
- H-bonding 10-40 kJ/mol
 - \hookrightarrow super strong dipole-dipole
 - $\begin{array}{ccc} \ddot{\text{O}}-\text{H} & ?-\ddot{\text{N}}-\text{H} & \text{H}-\ddot{\text{F}}: \\ | & | & \vdots \\ ? & ? & \end{array}$