

10/23/2009

**Home assignment:** - *aim to complete by the end of next week (Nov 3 )*

**Chapter 11.** – Read Ch.11, through and including section 11-6 (up to pp. 447)

**Recommended problems:** on pp. 467- 473): 11.XX, where XX is:

1, 6, 12, 13, 14,  
37, 53, 63, 64,  
69, 77, 81, 95,  
103, 107, 117, 121,

(Most of these are blue. Work out your own solution first, THEN check the book solution. Be sure you understand it and can do it on your own!)

**Some of the important terms/concepts** (define/explain in writing):

Phase transition: melting/freezing, vaporization/condensation, sublimation.  
Freezing point, melting point. Viscosity. Surface tension, Intermolecular Forces: Van-der-Waals, London, dipole-dipole force. Hydrogen bonding. Types of solids: molecular, covalent network, metallic, ionic.

**developing skills (no calculations this time. Qualitative approach only):**

1. Understanding the phase diagram
2. Explaining temperature curves for phase transitions
3. Understanding energy flow direction in phase transitions
4. Predicting general trends for melting points for solids of different types and boiling points for liquids.
5. Recognizing different intermolecular forces types based on molecular formula.