

“Amorphous Materials”

Class # _____ Name _____

1. Fill in the blank. (3 points)

- 1) If liquid is cooled, two events can occur. Crystallization and glass transition are () transition and () transition, respectively.
- 2) On cooling, although the () is continually increasing, this is opposed by the rapidly decreasing () which dominates at very high undercoolings. Eventually, homogeneously () at T_g .
- 3) DSC measures the () and () associated with transitions in materials as a function of time and temperature in a controlled atmosphere.

2. Describe briefly the classification of phase transition. (3 points)

3. Draw schematic diagrams for the relationship between G (Gibb's free energy) (or S (Entropy), C_p (heat capacity)) and T (temperature) in liquid to glass transition and liquid to crystal transition. (4 points)

*** Suggestion for class or request for personal conversation:**