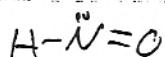
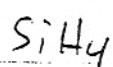
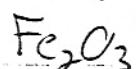
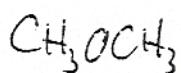
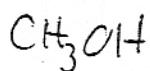
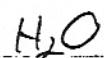
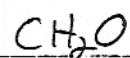


(11-8)

① Identify any Forces (Other than London) for following:



② Which has London as only binding force?



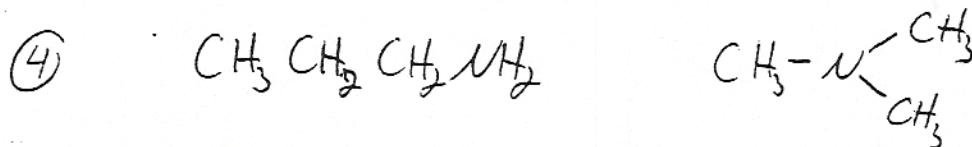
11-9

① Which will have highest bp? mp?

SO_2	Cl_2	HPO_4^{2-}	$\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$
mw = 64	70	65	72

② Which has highest mp? NaCl HOCH_2CH_3 CH_3OCH_3
lowest bp?

Highest bp:



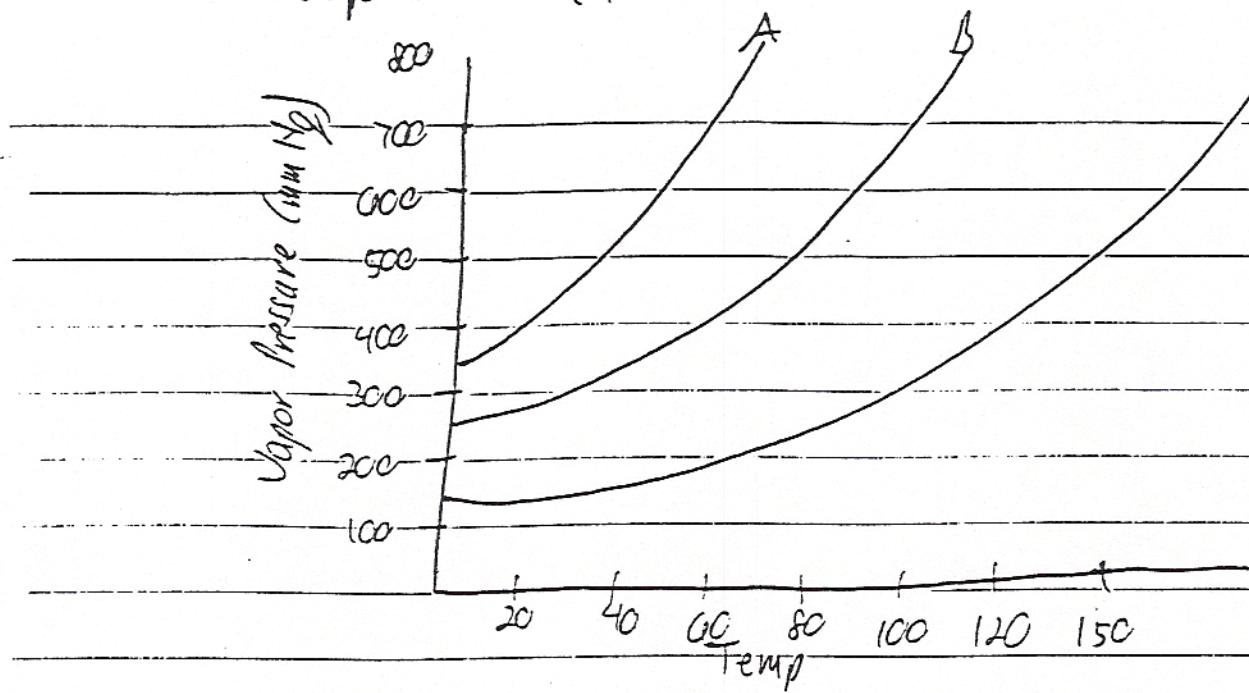
⑥	Br_2	F_2	SiH_4	CO_2
	100	38	32	44

⑦ Rank, from highest to lowest bp?

CH_3NO_2	LiF	Cl_2	CH_3OH
70	26	70	32

(E1-14)

Vapor pressure curve



① What's the "normal" bp for B?

② What's the bp for A at 400 mm Hg?

③ What temp needed to get 400 mm Hg for C?

④ Rank the IMF for A, B + C.

11-17

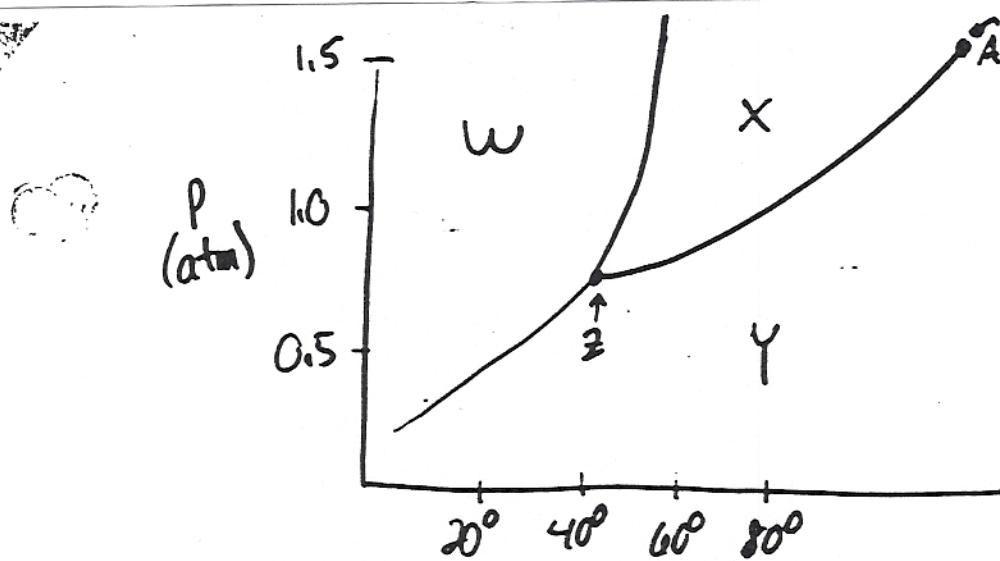
Heating Curve Sample Problem

How much energy (kJ) to heat 36 g ice
(18g/mol) from $-50^{\circ}\text{C} \rightarrow +50^{\circ}\text{C}$?

Given: $\Delta H_{\text{fusion}} = 6.01 \text{ kJ/mol}$

specific heat (ice) = $2.09 \text{ J/g}\cdot\text{K}$

specific heat (water) = $4.18 \text{ J/g}\cdot\text{K}$



Which letter represents:

① Gas Phase

② Liquid

③ Solid

④ Triple Point

⑤ Critical Point

⑥ What is the normal bp?

- a) 20°
- b) 40°
- c) 60°
- d) 80°

⑦ What is the normal mp?

- a) 20°
- b) 50°
- c) 80°

⑧ When a ~~liquid~~ at 60° has pressure adjusted, at what pressure does it vaporize?

⑨ When solid at 0.5 atm is warmed, does it
a) melt or b) sublime