Recitation Activity: IMFs and Properties

1a. Draw out 3 molecules of CH3OH (methanol) showing the strongest interactions that are present between the molecules.

b. What type of interaction did you show in your picture? Identify the important features of the interaction and how they were depicted in your picture. Revise your picture if necessary.

c. What intermolecular forces are present in liquid CH_3OH?

2a. Draw out 3 molecules of CH_3OCH_3 (dimethyl ether) showing the strongest interactions that are present between the molecules.

b. What type of interaction did you show in your picture? Identify the important features of the interaction and how they were depicted in your picture. Revise your picture if necessary.

c. What intermolecular forces are present in liquid CH_3OCH_3?

3a. Draw our 3 molecules of CH_3CH_3 (ethane) showing the strongest interactions that are present between the molecules.

b. What type of interaction did you show in your picture? Identify the important features of the interaction and how they were depicted in your picture. Revise your picture if necessary.

c. What intermolecular forces are present in liquid CH_3CH_3?

4. What would you predict would be the relative boiling points of methanol (CH_3OH), dimethyl ether (CH_3OCH_3) and ethane (CH_3CH_3)? Explain your answer, being sure to use the ideas of forces and energy.

5. Draw molecular level pictures of NaCl in both the solid and liquid phases. Be sure to show the relative sizes and ratio of the ions.

Solid	Liquid
Describe your picture and how it explains the fact that solid NaCl doesn't conduct electricity.	Describe your picture and how it explains the fact that liquid NaCl does conduct electricity.

6a. Which would you predict has a higher melting point NaCl or CsCl? Explain your answer.

b. Which would you predict has a higher melting point NaCl or MgO? Explain your answer.