

13 • IMF's, Liquids, & Solids

W O R K S H E E T

1. How many drops of water will fit on a penny? ____

2. Sketch the penny/water when the maximum number of drops are on the penny.

3. Why does the penny/water have the shape it does?

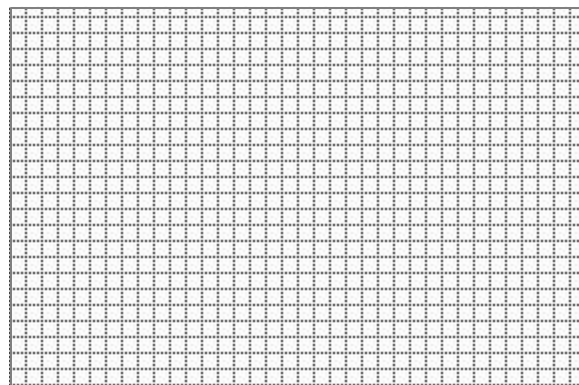
4. Define "surface tension":

5. List (at least) five examples of substances whose strongest IMF is:
dipole-dipole forces

hydrogen bonding

London forces

6.



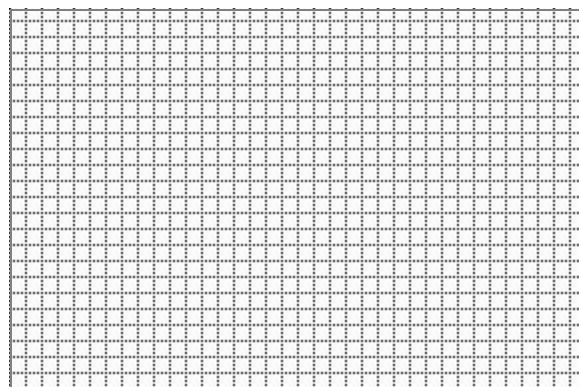
Molar Mass

Graph the Molar Enthalpy of Vaporization, ΔH_{vap} of F_2 , Cl_2 , & Br_2 . (6.6, 20.4, 30.0 kJ/mol)

Predict the value of I_2 : ____ kJ/mol

Explain the trend in terms of IMF's.

7.



Molar Mass

Graph the ΔH_{vap} of H_2O (40.7 kJ/mol), H_2S (18.7 kJ/mol), H_2Se (19.9 kJ/mol), and H_2Te (23.8 kJ/mol).

Explain the shape of the graph in terms of IMF's.