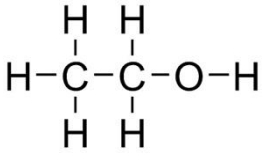
Name: **Period:** **Seat#:**



Ethyl alcohol, molar mass = 46.08 g/mol

The heat of fusion of ethyl alcohol, ΔH_{fus}, is 4.98 kJ/mol.
The heat of vaporization of ethyl alcohol alcohol, ΔH_{vap}, is 39.40 kJ/mol.

☐ Phase Change Equations

Write an equation for alcohol vaporizing. Include the energy value.

☐ Change on the Particulate Level

If alcohol molecules looked like ⬭, draw a before and after picture of alcohol vaporizing.

Before (liquid) **After (gas)**

☐ Calculations

How much heat is needed to boil 10.0 grams of ethyl alcohol? (Show work as a single line equation.)

How much heat is released when 25.0 grams of liquid ethyl alcohol freezes?
(Show work as a single line equation.)

Struggled? Got some wrong? Do some self-study on the back of this page!