

Participation Assignment

CHEM 1100-General Chemistry II

Name:

#2

Section: 31, MWF

Due Date: Friday 7/13/2018

1. A sample of 6.44 g naphthalene, $C_{10}H_8$, is dissolved in 80.1 g benzene, C_6H_6 . What is the mole fraction of each component in this solution?
2. What is the molality of an aqueous hydrochloric acid solution that is 37.0 % (by mass) HCl?
3. What is the molarity of an aqueous hydrochloric acid solution that is 37.0 % (by mass) HCl?
4. At 20 °C, pure water has a vapor pressure of 17.25 Torr. What is the vapor pressure of the solution formed by adding 28.1 g of sucrose ($C_{12}H_{22}O_{11}$), a nonelectrolyte, to 100.0 g of water?