

# Participation Assignment

## CHEM 1100-General Chemistry II

Name:

#2

Section: 31, TR

Due Date: Thursday 1/16/2020

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. 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?
3. What is the molality of an aqueous hydrochloric acid solution that is 37.0 % (by mass) HCl?
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