


Name: _____

Quiz #3: Solution Concentration

1. A sample of lead glass is prepared by melting together 20.0 G of silica, SiO_2 , and  80.0 G of lead (II) oxide. What is the mol fraction of component in the glass?
2. Describe how you would prepare a 2-m of glycerin, $\text{C}_3\text{H}_5(\text{OH})_3$, in water? How would this change if you were to prepare a 2M solution of glycerin in water?
3. A sample of an organic compound (non-electrolyte) weighing 1.350 G lowered the freezing point of 10.0 G of benzene to $1.82\text{ }^\circ\text{C}$. Calculate the molecular weight of the organic compound. (The freezing point depression constant of benzene is $5.12\text{ }^\circ\text{C}/\text{m}$ and the normal freezing point of benzene is $5.48\text{ }^\circ\text{C}$.)