General Chemistry
Mr. MacGillivray
Quiz #32:
Dissociation and Colligative Properties

1) Write a balanced equation for the dissociation of Na_2CO_3 in water.

2) The following precipitation reaction **<u>does</u>** take place:

$BaCl_2$ (aq) + Na_2CO_3 (aq) $\Rightarrow$?

Write the molecular equation for the above reaction.

- MAKE SURE that the products contain the correct ions paired with each other.
- MAKE SURE that the formulas make sense in terms of charge (i.e., do they "add up to zero"?)
- MAKE SURE that you indicate the phase of matter with s, l, g, aq, etc.

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3) Write the COMPLETE ionic equation for the balanced molecular equation below.

$AgNO_3$ (aq) + NaCl (aq) $\Rightarrow$ AgCl (s) + $NaNO_3$ (aq)

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4) Write the NET ionic equation for the balanced molecular equation below.

Na_2SO_4 (aq) + $BaCl_2$ (aq) $\Rightarrow$ 2 NaCl (aq) + $BaSO_4$ (s)

5) How will the boiling point of a solution be changed if more solute is dissolved in it?

6) How will the freezing point of a solution be changed if more solute is dissolved in it?

7) How will the vapor pressure of a solution be changed if more solute is dissolved in it?