COLLIGATIVE PROPERTIES PRELAB: PLEASE WRITE ANSWERS DIRECTLY INTO YOUR LAB NOTEBOOK

1. Explain what happens, on a molecular or ionic level, to the following when they dissolve in water:
   a. glucose, C₆H₁₂O₆
   b. sodium chloride, NaCl
   c. sodium sulfate, Na₂SO₄

2. Determine the freezing point of an aqueous solution containing 10.50 g of magnesium bromide in 200.0 g of water.

3. A solution is prepared by dissolving 0.490 g of an unknown compound in 50.00 mL of water. The freezing point of the solution is –0.201°C. Assuming the compound is a nonelectrolyte, what is the molecular mass of the compound? Use 1.00 g/mL as the density of water.