

BIO II Honors Osmosis Lab Questions

PreLab Questions

- 1.) Create a data table for this lab in your notebook (make it neat). Collaborate with your lab group members. Be sure to give the lab a title.
- 2.) What are the independent and dependent variables in this experiment?
- 3.) How will knowing the amount of water gained or lost by the potato pieces help you determine the molar concentration of the unknown sugar solutions?
- 4.) What is your hypothesis concerning the outcome of the sucrose vs salt trial? (Which solutions will be more hypertonic and why?)
- 5.) Calculate the water potential of each beaker used in the lab. Record this in your data table. **Be sure to show your calculations in your lab notebook!**

PostLab Questions

- 1.) Show your % mass calculations in your lab notebook, neatly. Show **each** calculation.
- 2.) Which unknown solution corresponded to the following molar concentrations? 0.0M, 0.2 M, 0.4M, 0.6M, 0.8M, 1.0M
- 3.) Was your hypothesis concerning the known salt and sugar containers accurate?
- 4.) Relate the results of the known salt and sugar trial to what you know about water potential.
- 5.) Using the graphs that you drew, determine approximate molar concentration of solutes in the potato cells (hint: think about what concentrations of sugar would be isotonic to the potato cubes).