

AP Biology Osmosis & Diffusion Lab

Cover Page - staple this list to the cover page also

Part A - Diffusion

1. Purpose and your hypothesis
2. Diagram of lab set up (beaker, bag, label solutions and indicate with arrows what happened)
3. Table 1.1.12
4. Overall conclusion and errors
5. Conclusion questions #1-4 (questions and answers)

Part B – Sucrose and Dialysis Bags

1. Table 2 (with hypothesis), add a conclusion (+, - or 0) column to the chart
2. Line graph of % Mass Change and Sucrose Molarity
3. Conclusion Questions 8-14 from packet
4. A simple diagram of showing the contents of each beaker/cup and use an arrow to indicate water movement

Part C – Plant Cells and Water Potential (Potato)

1. READ page S-8 to S-9, explain what water “potential” is and what happens if a cell high water potential and low water potential.
2. Why is temperature a factor in the water potential equation?
3. Data Table 3 (with hypothesis), add a conclusion (+, - or 0) column to the chart
4. Graph of % Mass Change in Potato and Sucrose Molarity (follow instruction #1-3)
5. Conclusion Questions #4-9. (Summarize or diagram the longer questions)

Conclusion and Summary

Which parts of the lab was osmosis? Diffusion? Did any parts have both? _____

If we did not want to wait “30 minutes” or overnight for results what **are two factors** you could have altered that would have affected the rate of osmosis or diffusion?

What is osmosis?

What is diffusion?

Of the three labs, which one helped you best understand why or how molecules move through “membranes?”

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