

Osmosis/Diffusion Worksheet

Data Table

A. Mass of the weighing dish	g
B. Results of glucose test of the cellular fluid	+ -
C. Initial mass of the weighing dish and the artificial cell	g
D. Initial mass of the artificial cell (C – A)	g
E. Initial volume of extracellular fluid	mL
F. Initial color of the extracellular fluid	
G. Initial results of glucose test on extracellular fluid	+ -
H. Final mass of the weighing dish and the artificial cell	g
I. Final mass of the artificial cell (H – A)	g
J. Final color of the extracellular fluid	
K. Final volume of extracellular fluid	mL
L. Amount of extracellular fluid gained or lost (K – E)	mL
M. Results of glucose test of the extracellular fluid	+ -

Post-Lab Questions

- Based upon the test results, did glucose move across the selectively permeable membrane in this experiment? Explain.
- What evidence was obtained in this experiment to show that water molecules moved across the selectively permeable membrane? What was the net “direction” in which water moved across the membrane? Explain.
- Based upon the data, did the red dye molecules move across the selectively permeable membrane? Explain.
- Predict whether a strawberry placed in concentrated saltwater will gain or lose water due to osmosis. Defend your prediction.