Name _____ Date _____ Period _____

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Passive Transport

Biology

Answer in complete sentences. Show your work for calculations.

1. Complete the table. Assume an animal cell contains about 0.9% solutes.

Solution around an animal cell (it contains about 0.9% solutes)	Water moves	Result for the cell
Distilled water		
0.9% solution (equal to the cell)		
10% solution (more solute)		

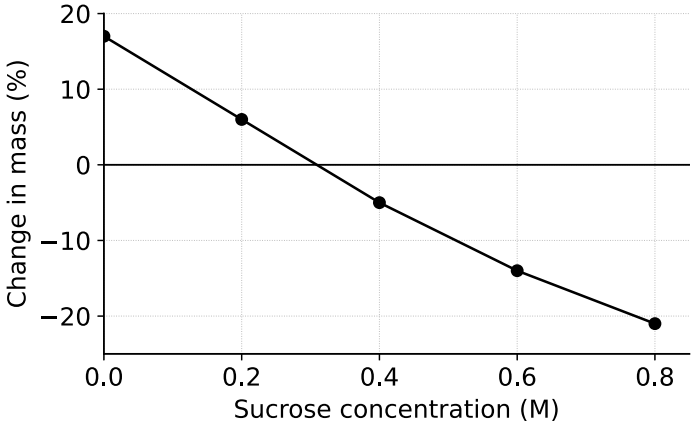
2. Potato cores were weighed, soaked for 24 hours, and weighed again. Find the percent change in mass of each core. Show your setup.

(a) Core 1: start 3.00 g, end 3.36 g

(b) Core 2: start 2.50 g, end 2.15 g

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3. Cores of equal mass were soaked in sucrose solutions of different concentrations (sample data).



(a) Estimate the concentration at which the mass would not change.

(b) Write a claim, evidence, and reasoning about what that concentration tells you.

4. Explain why diffusion does not require energy from the cell.

5. A carrier protein moves glucose into a cell. There is more glucose outside than inside. Does the cell need ATP for this? Explain.

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