Grid-in Questions – Unit 3 Test – Cellular Biology

1. A sweet potato cell has a molar concentration of sucrose of .42 at 25 °C. Calculate the Water Potential for this cell.



2. An AP Biology student conducted an experiment investigating osmosis in dialysis bags. The following data was obtained:

|  |  |  |  |
| --- | --- | --- | --- |
| Sucrose Concentration (M) | Initial Mass (g) | Final Mass (g) | Percent Change in Mass (g) |
| 0.0 | 26.0 | 26.3 | 1.2 |
| 0.2 | 26.2 | 27.0 |  |
| 0.4 | 26.1 | 28.1 | 7.7 |
| 0.6 | 26.4 | 29.3 |  |
| 0.8 | 26.3 | 30.2 | 14.8 |
| 1.0 | 26.4 | 31.2 |  |

Calculate the percent change in mass for 0.2M, 0.6M and 1.0M sucrose concentrations.

0.2 M Sucrose 0.6 M Sucrose

1.0 M Sucrose

