

# [Biology lab report of osmosis assignment](https://assignbuster.com/biology-lab-report-of-osmosis-assignment/)

A big fresh potato was taken and only cylinders from that potato were obtained. Mass and dimensions of the cylinders A single cork borer was used to cut out cylinders that were then cut to lengths of mm and egg. Type of solution used All of the cylinders were immersed in solutions of sucrose and distilled water. Volume of solution All the cylinders were immersed in beakers containing ml of the sucrose solution. Time of immersion The cylinders were immersed in the solutions for our for osmosis to take place with considerable change in length. Temperature of the osmosis setup

The water was taken from the same source and the entire experiment was conducted at room temperature (25 C). PH of the solution Using a pH meter the pH of all the solutions should be determined and it will be approximately neutral since only distilled water and sucrose powder in different concentration have been used PROCEDURE: Take 24 mall beakers and divide them into 3 sets. In each set, name each of the 8 beakers with numbers 20, 25, 30, 35, 40, 45, 50 and 55. These beaker numbers will indicate the concentration of the sucrose solution they will contain. In each beaker add ml of distilled water.

Weigh the masses of sucrose powder on the digital balance and mix them to beakers in each set filled with water according to the table shown below- volume of distilled water in CM mass of sucrose in (В?? O. 01)g concentration of solution in g dim-3 40. 0 0. 80 20 40. 0 1. 00 25 40. 0 1. 20 30 40. 0 1. 40 35 40. 0 1. 60 40 40. 0 1. 80 45 40. 0 2. 00 50 40. 0 2. 20 55 Using a stirrer, stir the solutions until the sucrose powder gets completely dissolved forming clear solutions. Now wash the potato in tap water and using a ark borer cut of cylinders of length CM from the potato.

Now place the potato cylinders next to ruler and cut the cylinders to mm. Weigh each one of them to make sure that they are of the same mass (egg was the mass in this experiment). Drop one cylinder into each of the 24 beakers containing the sucrose solutions. Leave the cylinders in the solution for 5 hours and then pick them up from the solution. Now measure the length of each cylinder using a measuring ruler in mm.