

estimating osmolarity of plant cells essay sample



**ASSIGN
BUSTER**

In this experiment you will be estimating the osmolarity of potato cells by finding their change in weight in solutions of known molarity. The object is to find the molarity where the mass does not change. No net change in weight indicates that there has been no net gain or loss of water. This is a means of indirectly finding the osmolarity of the cells themselves.

1. Get 100 ml of each of the solutions including distilled water. Place the solutions into the 250 ml beakers, and label them including your group names.
2. Use the cork borer to obtain seven complete potato cylinders at least 5.5 cm long.
3. Using the razor blade cut all the cylinders to a uniform length approximately 4.5 cm long, making sure to remove the skin from the ends in the process.
4. Place all the cylinders into a Petri dish and cover to prevent drying out.
5. Remove a cylinder and cut into discs about 5mm thick using the razor blade.
6. Remove excess water from the discs by blotting them with paper towel.
7. Weigh the discs on the balance.
8. Transfer the discs to the water beaker. Make sure not to lose any discs.
9. Repeat steps 5-8 with each cylinder, placing the discs into the appropriate solutions.
10. After waiting several hours to one day, remove