

## Investigating Osmosis – Lab Report

What is your name? \_\_\_\_\_

Title: Osmosis

Aim: To investigate osmosis using Irish potatoes

Materials: Irish Potato

Scalpel

Sugar

Water

Petri dish

Pins

Stopwatch

Procedure:

Instruction: Arrange these steps in the order they would be carried out in the laboratory.

1.

2.

3.

4.

Some concentrated sugar solution was placed in one half of the potato and a pin was used to mark the level of the solution.

A small potato was cut in half and the centre of each half was removed to create cups

After two hours, the level of solution in the potato was marked using a second pin.

The potato was then placed in a petri dish half-filled with pure water.

### Results:

Instruction: Complete the table below.

Table Showing the Change in level of Sugar Solution in Potato Cup

|                                              |  |
|----------------------------------------------|--|
| Change in solution level inside potato cups: |  |
|----------------------------------------------|--|

### Discussion:

Instruction: Fill in the blanks with the following words:

Higher dilute concentrated Lower

the potato cup water

selectively-permeable membrane

the petri-dish cell membranes

Osmosis is the movement of \_\_\_\_\_  
particles from a \_\_\_\_\_ solution to a  
\_\_\_\_\_ solution across a  
\_\_\_\_\_. In this experiment, pure water is  
dilute because it has a \_\_\_\_\_  
concentration of water particles than the sugar solution which has  
a \_\_\_\_\_ concentration of water particles.  
The water particles move from \_\_\_\_\_ to  
\_\_\_\_\_ across the  
\_\_\_\_\_ of the potato.

**Conclusion:**

**Instruction: Complete this sentence.**

Water moves into and out of potatoes by the process of  
\_\_\_\_\_.