**Title: Starch Bags**

**Introduction:** Particles can move through the semi-permeable zip lock bag. This membrane is similar to the cell membrane. In this activity you will predict and test the direction of the particle movement.

**Materials:** 1 piece of dialysis tubing 6 inches long, 2 pieces of string, 1 container, 10 ml starch solution, 25 ml weak iodine solution, 50 ml beaker, one petri dish.

**Prediction:** Which direction do you think the particles will move?

**Procedure:**

1. Open the dialysis tubing and tie off one end.
2. Fill with 10 ml starch solution, and then tie off the other end.
3. Fill a container with 25 ml weak iodine solution.
4. Put the tubing in the iodine solution.
5. Time for 5 minutes. Using the tweezers, carefully take the tube out and put in the petri dish.
6. Record the differences.
7. Put back into the beaker and time for another 5 minutes.
8. Record the differences.

**Data:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Dialysis Tubing** | **0**  **minutes** | **5**  **minutes** | **10minutes** |
| StarchyWater |  |  |  |

**Analysis:**

1. Sketch and label the tube and the movement of the particles.
2. What kind of particle movement was this?
3. How do you know?
4. How does the cell use particle movement?

**Conclusion:** List 2 things that you learned