Date Period

## Lab: Cell Transport

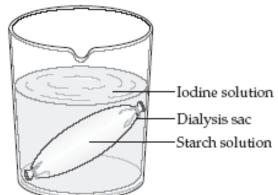
**BIOLOGY: UNIT 2** 

PURPOSE: Dialysis tubing is a artificial semi-permeable membrane tubing used in separation techniques, that allows the removal or exchange of small molecules from macromolecules in a solution by diffusion.

## **PROCEDURE:**

1. Observe initial colors of dialysis sac containing starch and the iodine solution in the table below.

- 2. Make follow-up observations at 15 and 30 minutes.
- 3. Answer Conclusion Questions.



Initial observation (color of solution and starch solution)	Observation (15m) (color of solution and starch solution)	Observation(30m) (color of solution and starch solution)

## **CONCLUSON QUESTIONS:**

1. Why was lodine used in this demonstration?

2. Was there any change in color to either the iodine solution or dialysis sac of starch at 15 minutes? What caused this? **Explain** 

3. Why doesn't the iodine solution turn black? (does the starch diffuse out of the sac?) Explain

4. After 30 minutes, not only was the starch in the dialysis tubing turned black, but it also expanded slightly. What do you think may have caused this? **Explain**