

Life Science 7

(Copy the following lab activity set up in your science notebook.)

Title: Activity 11A Lab: A Cell Model

Challenge Question: What is the function of a cell membrane?

Background:

- Cells of different organisms have similar structures, such as the cell membrane. These structures function similarly in different organisms.
- The function of the cell membrane is to control what can enter or leave the cell. Cell membranes are selectively permeable; some particles pass through but others cannot.

Vocabulary:

Term	Definition	Picture
cell		
cell membrane		
cytoplasm		
control		

Materials:

A Cell Model lab packet
1 bottle of Lugol's solution

cornstarch
water

2 plastic sandwich bags
2 plastic cups

Procedures:

1. Read and follow directions in *A Cell Model* lab packet.
2. Make observations and record data in Data Table 1
3. Answer Analysis questions from lab packet.
4. Write Conclusion.

Data/Results:

Table 1

Observations of Cell Membrane Permeability

Observations	Cup 1 Inside Plastic Bag	Cup 1 Outside Plastic Bag	Cup 2 Inside Plastic Bag	Cup 2 Outside Plastic Bag
Initial				
Final (after 30 minutes)				

Analysis Questions: *(Write answers to lab packet Analysis Questions here.)*

Conclusion: Explain how substances can enter or leave a cell. Use data, evidence and examples from the lab activity to support your answer.