

# Membrane Functions



## Directions:

Insert and install your Interactions: Foundations CD.

- Click the "Contents" button.
- Open the *Cellular Level of Organization* file.
- Click on *Animations*.
- Work through *Membrane Functions*.

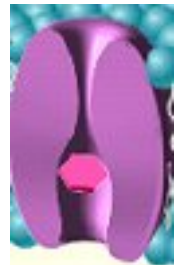
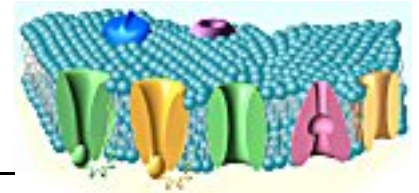
## Introduction

- What are some general functions of the cell membrane? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- Define *selective permeability*. \_\_\_\_\_  
\_\_\_\_\_

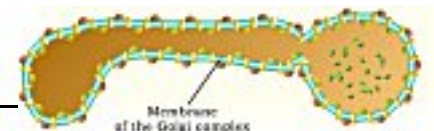


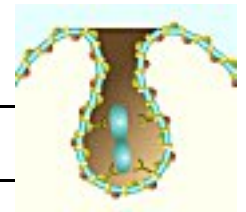
## Transport

- Describe membrane permeability for oxygen, water, and carbon dioxide. \_\_\_\_\_  
\_\_\_\_\_
- Describe membrane permeability for ions and glucose. \_\_\_\_\_
- What is the function of the membrane transport proteins? \_\_\_\_\_  
\_\_\_\_\_
  - Contrast each type.  
*open* - \_\_\_\_\_  
*gated* - \_\_\_\_\_  
*pump* - \_\_\_\_\_
  - Why is ATP needed for pumps? \_\_\_\_\_
  - Describe *transporter protein* functions.  
\_\_\_\_\_  
\_\_\_\_\_



- How are large molecules transported within cells?  
*vesicle transport* - \_\_\_\_\_
  - What is achieved by *exocytosis*? \_\_\_\_\_





c. What is achieved by *endocytosis*? \_\_\_\_\_

\_\_\_\_\_

d. What is *phagocytosis*? \_\_\_\_\_

7. How can membrane proteins perform the following functions?



*communication* - \_\_\_\_\_

\_\_\_\_\_

*enzymatic functions* - \_\_\_\_\_

\_\_\_\_\_

*cell identification* - \_\_\_\_\_

*cell junction formations* - \_\_\_\_\_

*desmosomes* - \_\_\_\_\_

*tight junctions* - \_\_\_\_\_

*gap junctions* - \_\_\_\_\_