

Name _____

Period _____

AP Biology

Date _____

CELL MEMBRANE / TRANSPORT DRAWING PROJECT

Produce a detailed drawing that includes the structure and function of the cell membrane. Below is a list of the cell membrane components that are required to include in your drawing. If we haven't discussed in class, then do research — textbook and Internet — to find accurate answers. The illustration must be completely hand-drawn. It also must include detailed, accurate images and labeled components.

Cell Membrane Structures

- | | |
|---|--|
| <input type="checkbox"/> Phospholipids | <input type="checkbox"/> Peripheral proteins |
| <input type="checkbox"/> Cholesterol | <input type="checkbox"/> Glycoproteins |
| <input type="checkbox"/> Transmembrane proteins | <input type="checkbox"/> Glycolipids |

Simple Diffusion

- Gradient, in proper orientation
- Specific example of molecule appropriately using this transport

Facilitated Diffusion

- Gradient, in proper orientation, using protein channel
- Specific example of molecule appropriately using this transport

Active Transport

- Gradient, in proper orientation, using protein pump
- Two different types of active transport illustrated
- Specific examples of molecules appropriately using this transport

Phagocytosis

- Example of type of substance brought in by this process
- Detailed steps of process
- Bilayer engulfing

Pinocytosis

- Specific example of substances brought in by this process
- Detailed steps of process
- Bilayer engulfing

Exocytosis

- Specific example of substances secreted by this process
- Detailed steps of process
- Bilayer releasing