

Problem Set 22: The Lipid Bilayer

1. What portion of a phospholipid is hydrophilic, and what portion is hydrophobic?
2. Using the generic “head” and “tail” diagram for phospholipids, show how two layers will coagulate together to form the lipid bilayer. Label the hydrophobic and hydrophilic regions.
3. What molecule adds more rigidity to the otherwise fluid lipid bilayer? Draw its GENERAL structure.
4. Which of the following uses energy to maintain different concentrations across the cell membrane?
 - a. Simple diffusion
 - b. Facilitated diffusion
 - c. Passive transport
 - d. Active transport
5. Explain how facilitated diffusion and active transport differ?