

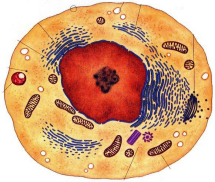
Name: _____

Date: _____

Life Science

Period: _____

Section 2.1: *Chemical reactions take place inside cells.*



How is the structure of the cell membrane vital to the survival of the cell?

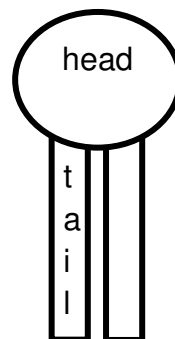
1. What function does the cell membrane provide for the cell?
2. Which macromolecule composes the majority of the cell membrane? _____

What is one of the most important properties of this group of macromolecules? (*Hint: it's the reason why this macromolecule is buffed onto cars and surf boards*)

3. What does the term "hydrophilic" mean? _____

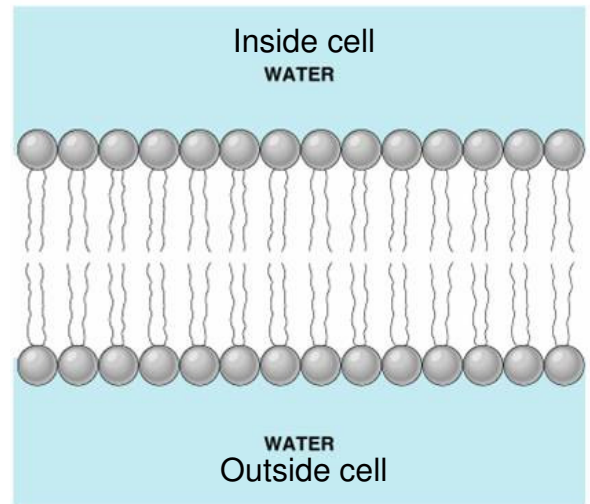
What does the term "hydrophobic" mean? _____

4. Label the lipid with the terms "hydrophilic" and "hydrophobic".



5. Water is located on both sides of the cell membrane – inside and outside the cell. The cell membrane consists of a double layer of lipids, called the **phospholipid bilayer**. Which part of the lipid most likely the exterior portion of the cell membrane?

6. To the right is the cell membrane's phospholipid bilayer. Label the **hydrophilic** heads and **hydrophobic** tails.



7. How does the structure of the cell membrane help it to “protect” the cell?
8. What would happen to a cell if the cell membrane was made of a molecule that did not repel water?