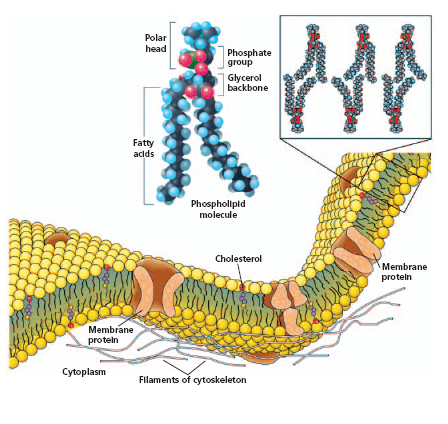
**Plasma Membrane (Honors-STEM)**

(Aka \_\_\_\_\_\_ Membrane)

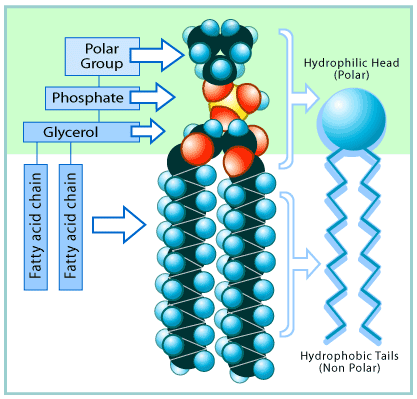


**What is it made of?**

* Phospholipids

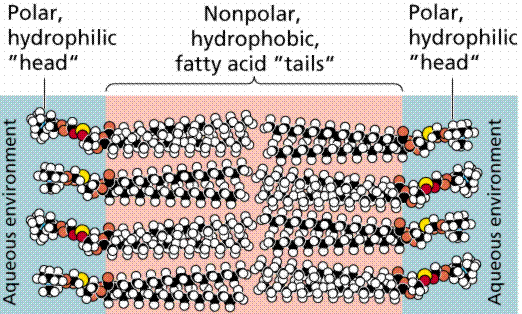
What are they?

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ heads
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fatty acid tails

****

**The lipids are arranged in a special way**

* A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: 2 layers
* Bilayers are sort of like a sandwich

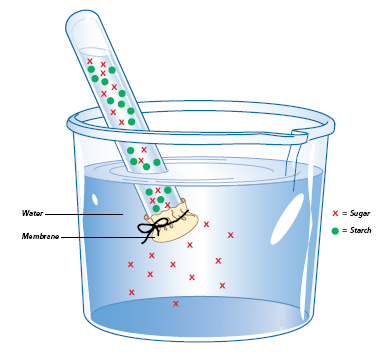


*Top Layer*

*Bottom Layer*

**Water is a key component of cells too!**

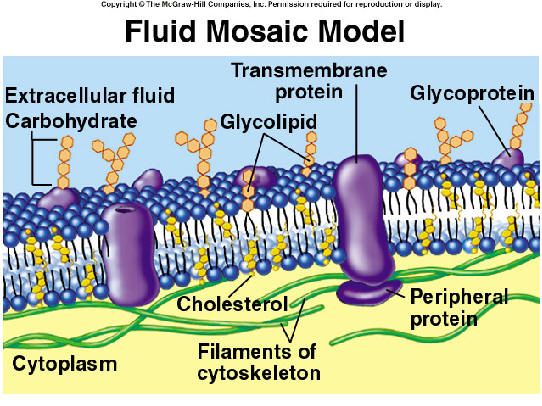
* Both \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_ of the cell
* The \_\_\_\_\_\_\_\_\_ phospholipid heads allow \_\_\_\_\_\_\_\_\_\_\_ to pass through freely
  + It doesn’t repel it!!
* However, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ tails keep the other stuff that is dissolved in the \_\_\_\_\_\_\_\_\_\_\_ from passing through the membrane.
* The plasma membrane is ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + This means that it can select what goes through it!
  + Kind of like the \_\_\_\_\_\_\_\_\_\_\_\_\_ in your back door!

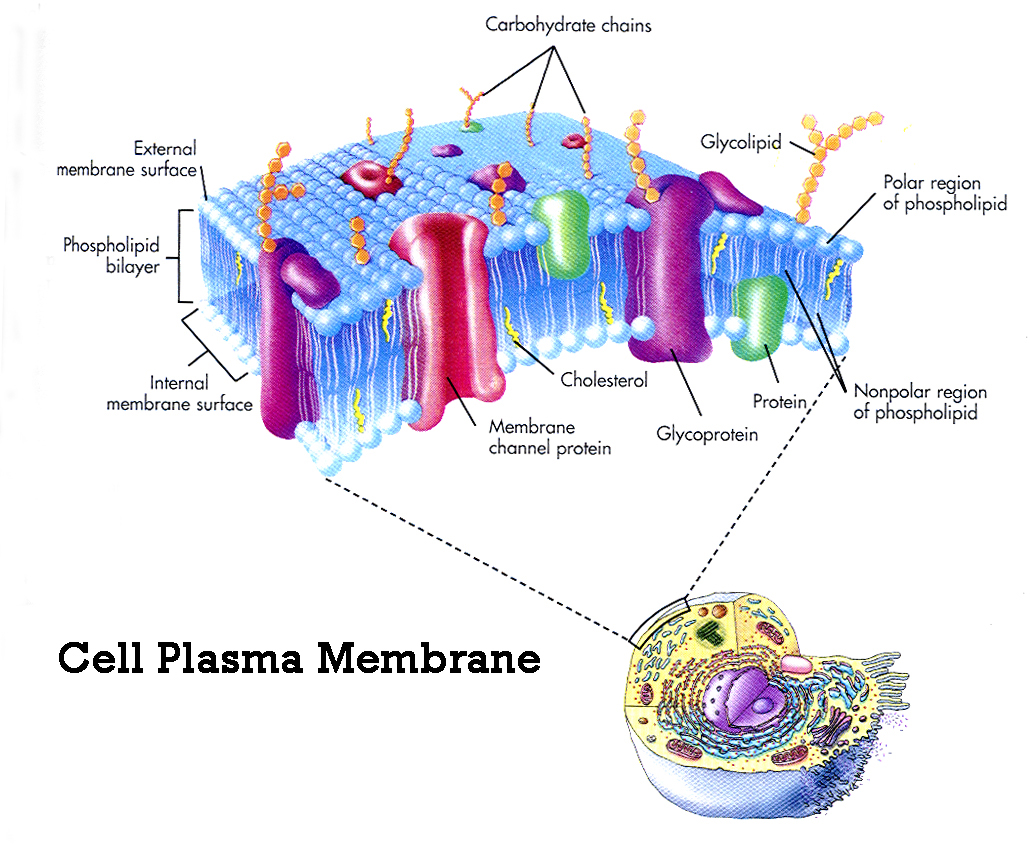


* What types of molecules enter and exit a cell?
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_🡪 in
  + Amino acids🡪 in
  + Waste🡪 out
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_🡪 out
  + Water🡪 in/out
  + \_\_\_\_\_\_\_\_\_\_\_\_\_\_🡪 in

**Other important stuff found in the plasma membrane**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- stabilizes fatty acids
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- for transporting large molecules across the membrane, others help attach to internal support structure
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- help with identifying chemical signals and other cells





*What other names, if any, are used for the following in this diagram?*

*Phospholipids-*

*Cholesterol-*

*Carbohydrates-*

*Membrane Protein*