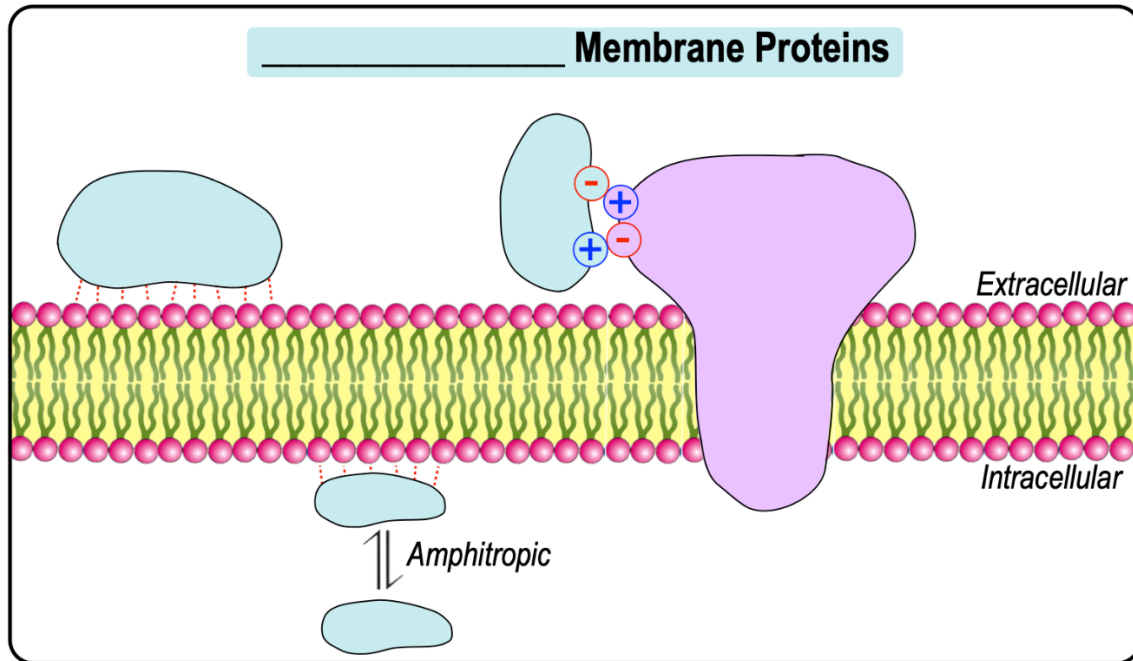


## CONCEPT: PERIPHERAL MEMBRANE PROTEINS

- Recall: *Peripheral-Membrane-Proteins*: on the *periphery* (\_\_\_\_\_) of the lipid bilayer.
  - Loosely associated with *either side* of membrane via \_\_\_\_\_ interactions & \_\_\_\_\_ bonding.
  - Associate with *polar headgroups of phospholipids* \_\_\_\_\_ *exposed surface of integral proteins*.
- *Amphitropic Proteins*: peripheral membrane proteins that can also be found diffused in the \_\_\_\_\_.

### EXAMPLE:



### PRACTICE: Peripheral membrane proteins:

- Penetrate deeply into the lipid bilayer.
- Can only be released from membranes by disrupting membrane structure via treatment with detergents.
- Are non-covalently bound to membrane lipids or integral proteins.
- Consist of  $\beta$ -barrels forming a hollow cylinder that creates a pore within the membrane.
- Are covalently attached to carbohydrates that span the bilayer.

### PRACTICE: Label each of the following as a characteristic of (A) Integral and/or (B) Peripheral Membrane Proteins:

- Could function on either side of the membrane: \_\_\_\_\_.
- Can act as a tunnel through the cell membrane: \_\_\_\_\_.
- Attaches only at the surface of a cell's membrane: \_\_\_\_\_.
- Extends through all or part of the membrane: \_\_\_\_\_.
- Loosely associated with the membrane: \_\_\_\_\_.
- Can act as amphitropic proteins: \_\_\_\_\_.