THURSDAY OCTOBER 27TH

QUIZ 3.1 HAS BEEN ENTERED FOR QUARTER 2 GRADE

STARTER: CREATE A NAME FOR EACH OF THESE REAL PHOBIAS! (HINT: THINK LATIN!)

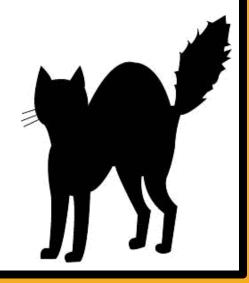
SCRIPTOPHOBIA NUMEROPHOBIA BIBLIOPHOBIA FELINOPHOBIA FRIGOPHOBIA FEAR OF WRITING IN PUBLIC

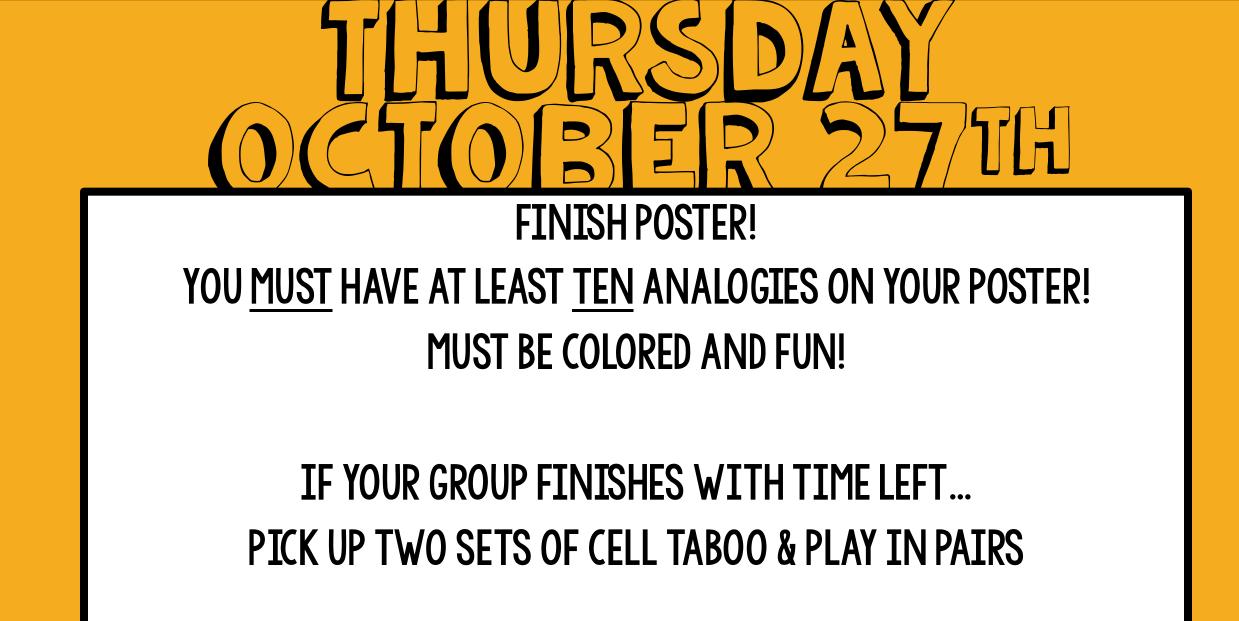
FEAR OF NUMBERS

FEAR OF BOOKS

FEAR OF CATS

FEAR OF COLD OR COLD THINGS







WELCOME TO QUARTER 2! 3.1 TUTORING ON TUESDAY AFTER SCHOOL QUIZ 3.1 RETAKES HAPPENING NOW!

STARTER:

REMEMBER WAAAAY BACK TO OUR BUBBLE ACTIVITY... WHAT ARE SOME PROPERTIES OF THE CELL MEMBRANE YOU EXPLORED?



RETAKE SCHEDULE:

MONDAY - THURSDAY BEFORE SCHOOL @ 7:30AM Monday - Thursday After School @ 2:50PM Plan Wisely!

QUARTER 2 CITIZENSHIP:

WILL SEE IN GRADEBOOK

ITEM WILL NOT CALCULATE INTO YOUR GRADE

3.2 Cell Membrane Structure **STANDARD OBJECTIVES:** • I CAN DIAGRAM THE STRUCTURE OF THE CELL MEMBRANE • I CAN DESCRIBE THE PROPERTIES AND FUNCTIONS OF THE **CELL MEMBRANE**

FUNCTION OF THE CELL MEMBRANE

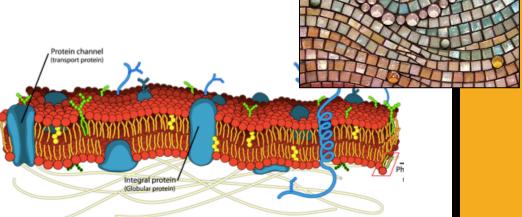
• FLUID MOSAIC MODEL

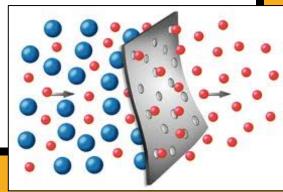
FLEXIBLE AND FLUID (CONSTANTLY MOVING)

MANY COMPONENTS STUCK IN MEMBRANE

• SEMI-PERMEABLE BARRIER

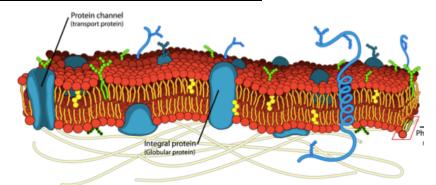
ALLOWS ONLY <u>SMALL UNCHARGED</u> MOLECULES THROUGH LARGE AND/OR CHARGED MOLECULES MUST GET THRU OTHER WAYS





PROPERTIES OF THE CELL MEMBRANE

- MEMBRANE IS FLUID AND FLEXIBLE
- MEMBRANE CAN REPAIR ITSELF

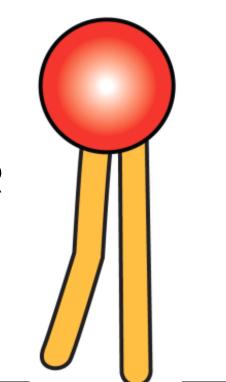


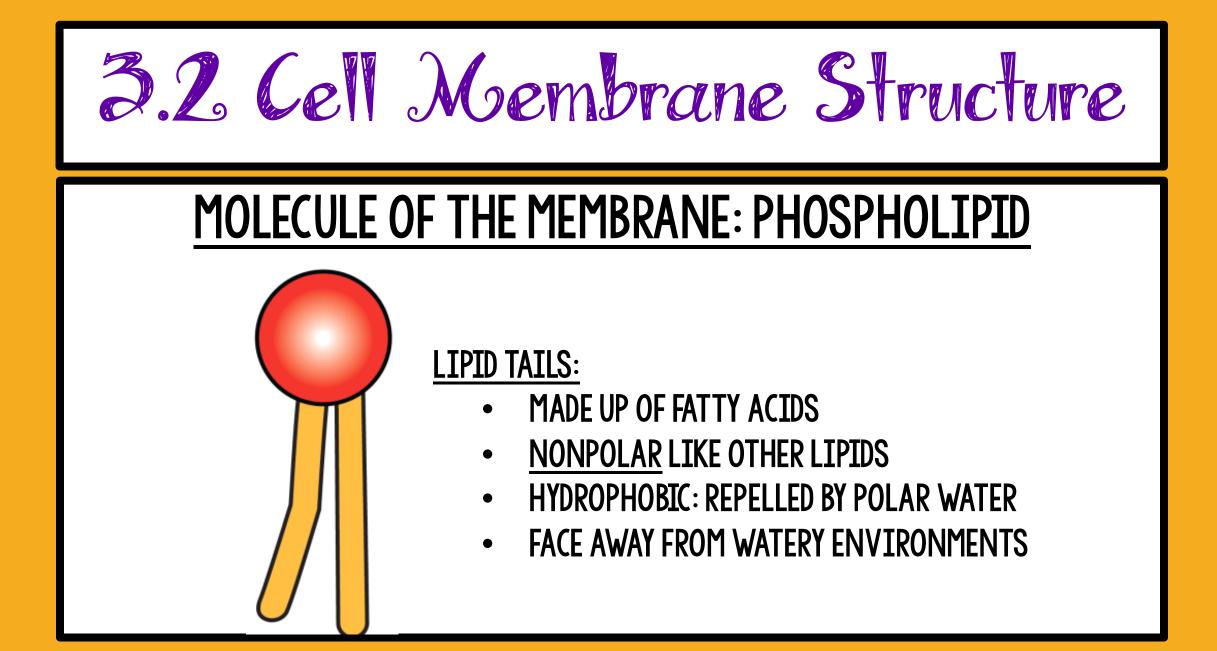
- ORGANELLES HAVE THEIR OWN MEMBRANES LIKE THE CELL MEMBRANE
- MEMBRANE PROTEINS HAVE SPECIAL FUNCTIONS WITHIN THE MEMBRANE

MOLECULE OF THE MEMBRANE: PHOSPHOLIPID

PHOSPHATE HEAD:

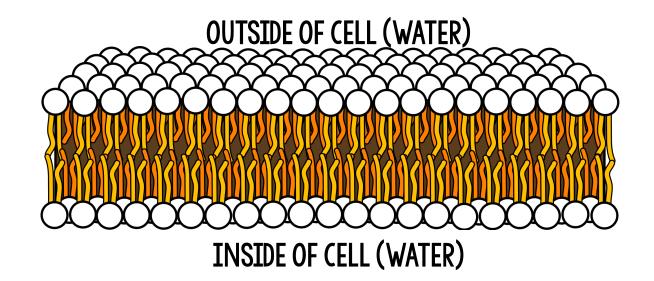
- MADE UP OF OXYGEN & PHOSPHORUS
- OXYGEN CREATES <u>POLARITY</u>
- HYDROPHILIC: ATTRACTED TO POLAR WATER
- FACE TOWARD WATERY ENVIRONMENTS





PHOSPHOLIPID BILAYER

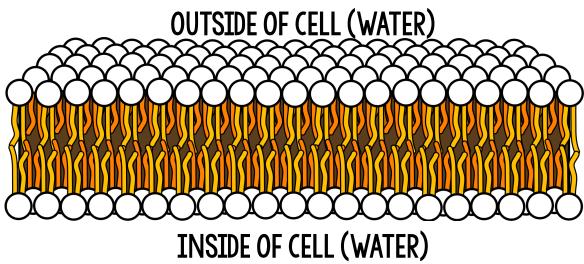
MEMBRANE IS ARRANGED IN <u>TWO</u> LAYERS OF PHOSPHOLIPIDS



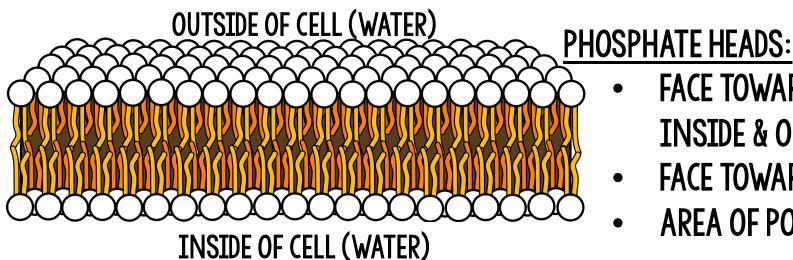
PHOSPHOLIPID BILAYER

LIPID TAILS:

- FACE TOWARD EACH OTHER AWAY FROM WATERY INSIDE & OUTSIDE
- FACE AWAY DUE TO HYDROPHOBIA
- AREA OF NONPOLARITY



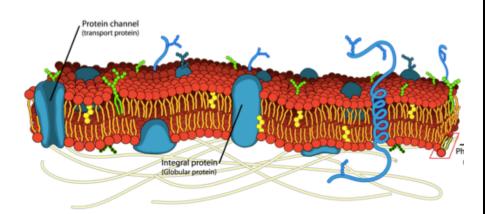
PHOSPHOLIPID BILAYER



- FACE TOWARD OUTWARD TO WATERY **INSIDE & OUTSIDE**
- FACE TOWARD DUE TO HYDROPHILIA
- **AREA OF POLARITY**

OTHER MOLECULES IN THE MEMBRANE:

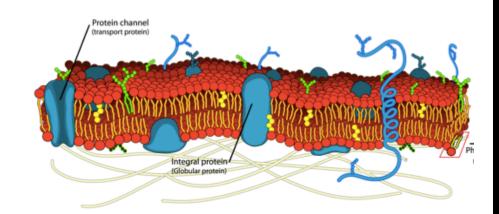
- TRANSPORT CHANNEL PROTEINS
 - TUBES THAT CREATE OPENINGS THROUGH THE MEMBRANE
 - ALLOW LARGE AND/OR CHARGED MOLECULES THROUGH



OTHER MOLECULES IN THE MEMBRANE:

• OTHER MEMBRANE PROTEINS

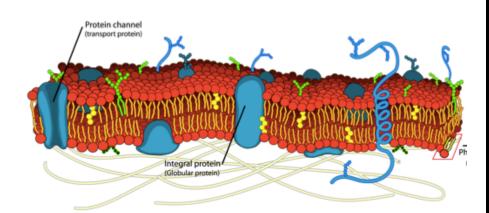
- ONLY ON INNER OR OUTER SURFACE
- ENZYMES FOR CHEMICAL REACTIONS ON INSIDE OR OUTSIDE OF CELL



OTHER MOLECULES IN THE MEMBRANE:

• GLYCOPROTEINS

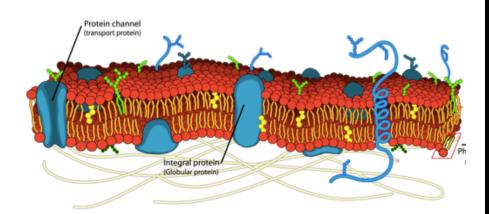
- MADE UP OF CARBOHYDRATES & PROTEINS
- USED FOR CELL-TO CELL COMMUNICATION



OTHER MOLECULES IN THE MEMBRANE:

CHOLESTEROL

- TYPE OF LIPID THROUGHOUT BILAYER
- HELPS MEMBRANE STAY FLUID/FLEXIBLE
- STABILIZES MEMBRANE



OTHER MOLECULES IN THE MEMBRANE:

CYTOSKELETON

• NETWORK OF PROTEINS TO GIVE CELL & MEMBRANE SHAPE & STRUCTURE

