Pre xmas Cellular Communication

Know and be able to:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**KNOW**

|  |  |  |
| --- | --- | --- |
| Polymer  Monomer  biological macromolecule  carbohydrates  lipids  proteins  nucleic acids  **polarity**  **cohesion**  **adhesion**  **hydrophillic**  **hydrophobic**  eukaryote  prokaryote  organelles  ATP  Immune cells  macrophages | **surface tension**  cell membrane  selectively permeable  **phospholipid bilayer**  transport proteins (channels)  **fluid mosiac model**  **eukaryote**  **prokaryote**  organelles  diffusion  osmosis  concentration-gradient  passive transport  active transport  B cells  T cells  skeletal muscle  smooth muscle  cardiac muscle | endocytosis  exocytosis  equilibrium  solution  solute  isotonic solution  hypertonic solution  hypotonic solution  epidermis  dermis  subcutaneous tissue  fight or flight  neurons  dendrite  axon  axon terminal |

**BE ABLE TO**

* describe how cells transport materials into and out of the cell membrane and the structures they use for this process
* make predictions on cells’ ability to grow or shrink based on the solution they are in
* compare and contrast eukaryotes and prokaryotes
* provide examples of the 4 biological macromolecules the and the bodily functions they are need for
* know the properties of water
* know the structures of skin and their functions and how skin cells play a role in the fight or flight response
* know the structure of nerve cells and how chemical messages pass through them
* know the types of neurons and what they are classified for
* know the structure of muscle cells and be able to describe how a muscle cell contracts using this vocabulary ( sarcomere, myosin, M line, Z line, actin, cross-bridge)
* know the types of muscle cells and what they do
* identify parts of a scientific experiment (independent variable, dependent variable, controls)
* compare and contrast a positive feedback loop with a negative feedback loop