

# BIOLOGY Review... Chemistry & Cells

Chapters 2, 3

## CELL CHEMISTRY:

IN ORDER TO UNDERSTAND CELL STRUCTURE & FUNCTION, WE MUST FIRST UNDERSTAND THE CHEMISTRY OF LIVING ORGANISMS.

1. What 4 groups of substances found in living organisms? What are the functions for each?
2. Define element, compound, atom, ion, isotope, ionic bonds & covalent bonds.
3. What happens in a chemical reaction? What do enzymes do?
4. Define metabolism and homeostasis.
5. Define solution, acid, base & pH

## CELL BIOLOGY:

FUNDAMENTAL LIFE PROCESSES OF PLANTS AND ANIMALS DEPEND ON A VARIETY OF CHEMICAL REACTIONS THAT OCCUR IN SPECIALIZED AREA'S OF THE ORGANISM'S CELLS.

6. Describe a cell's membrane structure.
7. What are the differences between prokaryotic & eukaryotic cells? How do viruses differ?
8. How are the endoplasmic reticulum and Golgi apparatus involved in secreting proteins?
9. How does the cell's membrane regulate cell's interactions with their surroundings?
10. Define semipermeable, passive transport, active transport, diffusion & osmosis.
11. How is exocytosis different from endocytosis?