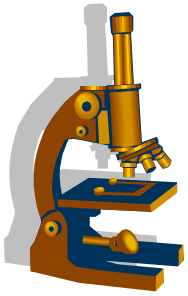
Student Study Guide - Biology



Building Molecules:

For your test you should be able to demonstrate your understanding of the following items:

- ❑ Name each subatomic particle of an atom, their placement and charge within an atom.
- ❑ Definition of an ion, isotope, hydrophilic, hydrophobic, and radioactive isotope.
- ❑ Name the three basic bonds and define their relationships between elements.
- ❑ How the elements are arranged on the periodic table and know the information provided in an individual box within it.
- ❑ Identify a given variety of isotopes (e.g., regular form, a stable isotope, and unstable radioactive isotope).
- ❑ Identify and explain Three properties of water.
- ❑ Identify the four basic elements, which one is most electronegative, and which one is most versatile and why. Also be able to identify four basic macromolecules of living things.
- ❑ Justify how changes in an amino acid sequence will affect the structure and function of a hemoglobin molecule and how a specific sequence of amino acid determines the shape of a protein.
- ❑ Differentiate between hydrophilic and hydrophobic properties and give examples of each one.
- ❑ Identify pH levels in solution and by number.
- ❑ Explain how enzymes are critical to cell survival with regulation of biochemical reactions.
- ❑ The four basic macromolecules, the various types there are, their shape, function, how their form fits function, their subunits (monomers), and an example of each one.
- ❑ The four levels of protein structure, the shape/structure of each level, and the bonding that occurs at each level.
- ❑ Explain how the shape of nucleic acids facilitates the creation of new DNA molecules for other cells.

Review all handout materials, class notes and your ticke ins.

And

STUDY! ***STUDY!*** ***STUDY!***

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