## Chemistry of Life Review:

NAME-

The topics or questions listed on this review will help you to know what will be on your test. Study and be familiar with the following: **1. Atoms/Elements**:

**a.** Parts of the atom (fill in the blanks with the appropriate information)

Parts of the atom:	Protons	Neutrons	Electrons
Charge			
Location in the atom			

**b.** Know how to determine how many protons, neutrons, and electrons are in an element.

(For example: how many protons, neutrons, and electrons does an Oxygen atom have?)

c. The 6 elements that make up 99.9% of living things are:

d. Explain the difference in covalent vs. ionic bonds and give an example of a compound that is held together by each type of bond:

## 2. Properties of Water: (explain each one)

- a. Water is a polar molecule. Explain what this means.
- b. You need to know these properties of water and how they make life on earth possible:
  - Cohesion
  - Adhesion
  - High heat capacity
  - Capillary action
  - Universal solvent
  - Ice is less dense than liquid water
  - pH (draw a picture of the scale, include acid, basic, neutral and the numbers 0-14)

Macromolecule	MONOMER(S)	Elements made from	Function in the body	Example
Carbohydrates				
Lipids				
Proteins				
Nucleic Acids				

## 3. Macromolecules:

## 4. Enzymes :

**a.** What is an enzyme? Explain how they work (you may draw a picture if you'd like to):