

# CORNELL NOTES

Name: \_\_\_\_\_ Period: \_\_\_\_\_

Class: 7th Grade Science Date: 26 Nov 2012

## Topic: Chapter 4, Section 1 Chemistry of Life

Question Column

Notes Column

What is matter?	Anything that has mass and takes up space. Atoms, electrons, Protons, neutrons.
What is energy?	Anything that brings about change – that holds matter Together or breaks it apart.
What is an atom?	Is a solid, liquid, or a gas, made of electrons, protons, Neutrons.
What are elements?	They are one kind of atom. Periodic Table of Elements. Six elements that make up 99% of the human body: Oxygen, Carbon, hydrogen, nitrogen, sulfur, phosphorus.
What is a molecule?	Are atoms held together by the energy of chemical bonds. O <sub>2</sub> , H <sub>2</sub> O
What is a compound?	Made of two or more elements in exact proportions or a Balance. Sugar, salt are examples.
What are Molecular compounds?	Form when molecules share their outermost electrons. Water H <sub>2</sub> O and Sugar C <sub>6</sub> H <sub>6</sub> O <sub>12</sub>
What are Ions?	Atoms that combine because they are positively or Negatively charged.
What are Ionic Compounds?	Ions of opposite charges attract to each other and make Compounds that are essential for life. NaCl, MgSO <sub>4</sub> . Ions Are important for many cellular processes in organisms.
What is a mixture?	A combination of substances in which the individual substances retain their physical and chemical properties.
What is a solution?	Two or more substances that are mixed evenly and you Can't tell the difference between them.
What is a suspension?	When a liquid or gas has another substance evenly spread Throughout it. Suspensions eventually sink to the bottom.
What is an Organic Compound?	Always contain carbon and hydrogen and are found in all Living organisms. Carbohydrates, lipids, proteins, Nucleic Acids. Need to know the elements, examples, function on On page 102 Table 3

What is an  
Inorganic Compound

Made of elements other than carbon. Example  
Ammonia  $\text{NH}_4$ , water, calcium phosphate,  
Hydrochloric acid, sodium bicarbonate, and salts.  
Know the uses of these on Table 4 on page 103.

Water?

Makes up most of the blood, most chemical reactions  
Occur in water, more than 50% of human body contains  
Water. Plants and animals also need for all cell  
Processes.

Characteristics of Water?

Water is a polar molecule (like the poles on a magnet)  
Help cells hold their shape –Cytoplasm.

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