LESSON 12

INTRODUCTION TO ORGANIC COMPOUNDS

I. Organic Compounds

A. Large, typically _____ compounds

B. Contains _____ , primarily from _____ things

1. Carbon has _____ electrons
2. Allows it to _____ with other elements in a _____ of ways
3. Excellent _____ for big, complex compounds
4. Exceptions: _____ (like CO_2) and _____ (CO_3^{2-})

C. Most contain _____

D. _____ : organic compounds containing only _____ and _____

II. Organic Compounds Have a Unique Naming System

A. Unique prefixes

1. 1: _____
2. 2: _____
3. 3: _____
4. 4: _____
5. 5: _____
6. 6: _____
7. 7: _____

8. 8: _____

9. 9: _____

10. 10: _____

B. Instead of looking at subscripts for _____ of the elements, you just look at the number of _____ in a chain

C. If all carbons are bonded together because they share a _____ _____ (single bond), then the name of the compound ends in _____

D. Example: CH_4

1. There is ____ carbon, so use the prefix _____
2. Carbon is bonded with a _____ , so use the suffix _____
3. Name: _____

E. Example: C_3H_8

1. There are ____ carbons, so use the prefix _____
2. Carbon is bonded with a _____ , so use the suffix _____
3. Name: _____

III. More Complex Organic Compounds

A. Organic compounds can become more _____ by replacing some of the hydrogens with whole _____ of other elements

1. Example: Methane becomes methanol
    a. Methane is _____
    b. One ____ atom is replaced with _____
    c. Methanol is _____

2. Example: Propane becomes isopropanol

   a. Propane is _____

   b. One ____ atom is replaced with _____

   c. Methanol is _____

B. A _____ is a long _____ made of smaller molecules

1. Examples: _____

2. Example: Polyethylene

   a. Ethylene: _____

   b. Poly- means _____