

### BIO 130 Worksheet 3: Atoms & Molecules

Name \_\_\_\_\_ Section: \_\_\_\_\_ Date: \_\_\_\_\_

1. Using the Periodic Table of Elements, determine the number of protons, neutrons, and electrons in each of the following atoms. Please show your work. Draw a model of each of the atoms in the box showing the electrons in the proper energy levels. (30 pts)

A. Carbon    **12** mass        **6** protons  
              **6** atomic #    **6** electrons  
              **6** neutron    **6** neutrons

c) ) )

# of electrons in orbit 1 = **2**  
# of electrons in orbit 2 = **4**

B. Hydrogen    **1** mass        **1** protons  
                  **1** atomic #    **1** electrons  
                  **0** neutron    **0** neutrons

H) )

# of electrons in orbit 1 = **1**

C. Oxygen    **16** mass        **8** protons  
              **8** atomic #    **8** electrons  
              **8** neutron    **8** neutrons

o) ) )

# of electrons in orbit 1 = **2**  
# of electrons in orbit 2 = **6**



B) How many of each atoms are on the **right**? **Cu 4 O 2 C 1**