**CHAPTER 6: CHEMISTRY IN BIOLOGY OUTLINE QUIZ #1**

*\*SECTION 1 THROUGH COMPOUNDS*

1. \_\_\_\_\_\_ is anything that has \_\_\_\_\_ and takes up space.
2. \_\_\_\_\_\_\_\_\_\_\_ occurs in every chemical reaction
3. The building blocks of matter are referred to as \_\_\_\_\_\_; and \_\_\_\_\_\_\_\_ are made up of matter.
4. \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ are located in the nucleus, whereas \_\_\_\_\_\_\_\_\_\_\_ are found orbiting the nucleus.
5. Give the charge of each of the following particles:
   1. Proton
   2. Neutron
   3. Electron
6. What is the overall charge of an atom and why?
7. \_\_\_\_\_\_\_ are made up of only \_\_\_\_\_\_ type of atom and cannot be broken down \_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_.
8. Organizational chart for over 100 elements
9. Elements are pure substances that cannot be broken down \_\_\_\_\_\_ or \_\_\_\_\_\_
10. There are \_\_\_\_\_\_(#) elements that occur naturally.
11. The number of protons are equal to the \_\_\_\_\_\_\_\_ on the periodic table.
12. How can the number of neutrons be found?
13. The horizontal rows are \_\_\_\_\_\_\_ and the vertical rows are \_\_\_\_\_\_\_.
14. How are elements within a group similar?
15. \_\_\_\_\_\_ are elements that have a different number of \_\_\_\_\_\_ in the nucleus.
16. Nitrogen-14 and Nitrogen-15 are considered \_\_\_\_\_\_\_\_\_. Draw a diagram representing both and label the difference.
17. Give off radiation because of an unstable nucleus
18. Used to help calculate age of a once living object such as a bone.
19. Formed when two or more elements combine.
20. Compounds are \_\_\_\_\_\_\_\_ formed from a combination of elements in a \_\_\_\_\_\_\_\_
21. Compounds are \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ different than the elements they are composed of.
22. Compounds can be broken down by \_\_\_\_\_\_\_\_\_ means but not by \_\_\_\_\_\_\_\_ means.
23. Fill in the chart below using your periodic table.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Element** | **Symbol** | **Atomic #** | **Mass #** | **Protons** | **Neutrons** | **Electrons** | **Val eˉ** |
|  | **Be** |  |  |  |  |  |  |
|  |  | **14** |  |  |  |  |  |
| **Argon** |  |  |  |  |  | **18** |  |
|  |  |  | **4** |  |  |  |  |
|  |  |  |  | **16** |  |  |  |
|  |  |  |  |  | **7** |  | **5** |
|  |  |  | **24.3** |  |  |  |  |