Mr. Murray, IPC   Name: _____

IPC Textbook Guided Reading – Chapter 19   Period: _____

(Start after finishing your test; turn in when done.)

1. Most matter is made up of c_____. Most pure elements eventually r_____ with other elements or compounds. (p.319)

2. When atoms combine to make molecules they form c_____ b_____.

3. The maximum number of valence electrons an atom can have is e_____.

4. In order to achieve 8 valence electrons, atoms will lose, gain, or share them to become chemically stable. This is known as the o_____ r_____.

5. Lithium has how many valence electrons? _____ (p.320)

6. Will lithium gain or lose its valence electrons? _____.

7. Elements in column 2 have _____ valence electrons. (p.321)

8. To show the number of valence electrons, we often use d_____ d_____. (p.322)

9. In dot diagrams, the number of dots placed around the symbol of the element is equal to the number of v_____ e_____.

10. I_____ b_____ are formed when atoms gain or l_____ electrons.

11. When atoms gain or lose e_____ they become i_____, or atoms that have an electrical charge. (p.323)

12. When sodium loses one electron it becomes an ion with a charge of _____.

13. A sodium ion and a chlorine ion are attracted to each other and form an i_____ b_____.

14. Most atoms s_____ electrons in order to gain a stable octet.

15. When atoms share electrons to bond a c_____ b_____.

16. When two atoms of the same element combine in a covalent bond d_____ m_____.

17. Bonds between a metal and nonmetal tend to be i_____. (p.324)

18. Bonds between nonmetals can be classified as c_____.

19. Atoms in the first two columns want to g_____ r_____ of electrons to get a full octet.

20. Because sodium chloride is a compound made out of ions, it is called an i_____ c_____. (p.326)

21. Sodium has a charge of +1 and chlorine has a charge -1, when they combine the net electrical charge is z_____.

22. All compounds have an electrical charge of zero; that is they are n_____.

23. Since sodium loses an electron to become Na+ (+1), we say it has an o_____ n_____ of 1+.

24. What is the oxidation number of Beryllium? _____.

25. PROBLEM: Using the oxidation numbers from page 327 and the process on page 328, write the formula a chemical with lithium and oxygen: