Name

 Period

 Date

 Lewis Dot Diagrams (Ionic Bonding)

*Instructions: Draw the Electron Dot Diagrams for the following elements.*

|  |  |  |
| --- | --- | --- |
| **Cations:** (use one color or x’s) | **Anions:** (use another color or o’s) | **Ionic Bonds:** (use your two different colors or your x’s and o’s when bonding) Make a FULL valence shell. |
| 1 Li | F | LiF |
| 2 Mg | S | MgS |
| 3 Al | N | AlN |
| 4 Na | Cl | NaCl |

*Instructions: Answer the following multiple choice and fill-in-the-blank questions using your guided notes (if needed).*

5 When an atom has a full valence shell it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (stable or unstable) atom.

6 How many electrons does a “full” valence shell have?

7 Which group always has a full valence shell?

8 Group numbers \_\_\_\_, \_\_\_\_, and \_\_\_\_ are usually cations.

9 Cations \_\_\_\_\_\_\_\_\_ (give or receive) electrons.

10 Groups numbers \_\_\_\_, \_\_\_\_, and \_\_\_\_\_ are usually anions.

11 Anions \_\_\_\_\_\_\_\_\_ (give or receive) electrons.

12 Which of the following atoms is more likely to LOSE one or more electron? K, F, B, or Ne

13Which of the following atoms is more likely to GAIN one or more electrons? K, F, B, or Ne

14 Which of the following atoms is a stable atom? K, F, B, or Ne

15 If electrons are being lost and gained, explain what happens to the charge of the once neutral atom.