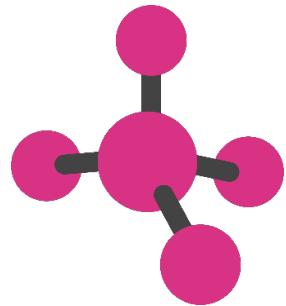


Ionic Bonding – Introduction

| Element | Number of Electrons | Number of Valence Electrons | Ion Formed |
|----------------|---------------------|-----------------------------|------------|
| Potassium (K) | | | |
| Iodine (I) | | | |
| Phosphorus (P) | | | |
| Magnesium (Mg) | | | |



Learning the Criss-Cross Method (do the charges balance out?)

| | |
|--|--|
| <u>Example 1:</u> Potassium (K) + Iodine (I) | <u>Example 3:</u> Calcium (Ca) + Oxygen (O) |
| | |
| <u>Example 2:</u> Potassium (K) + Oxygen (O) | <u>Example 4:</u> Magnesium (Mg) + Chlorine (Cl) |
| | |

Name _____ Period _____

Ionic Bonding – Practice Problems

Complete the problems below to create the correct compound when both elements are bonded.

1) Calcium (Ca) + Sulfur (S)

2) Magnesium (Mg) + Oxygen (O)

3) Boron (B) + Phosphorus (P)

4) Calcium (Ca) + Oxygen (O)

5) Sodium (Na) + Phosphorus (P)

6) Potassium (K) + Oxygen (O)

7) Sodium (Na) + Oxygen (O)

8) Sodium (Na) + Iodine (I)

9) Boron (B) + Nitrogen (N)

10) Potassium (K) + Nitrogen (N)

11) Aluminum (Al) + Chlorine (Cl)

12) Beryllium (Be) + Fluorine (F)

13) Lithium (Li) + Oxygen (O)

14) Aluminum (Al) + Bromine (Br)

15) Calcium (Ca) + Iodine (I)

16) Potassium (K) + Sulfur (S)