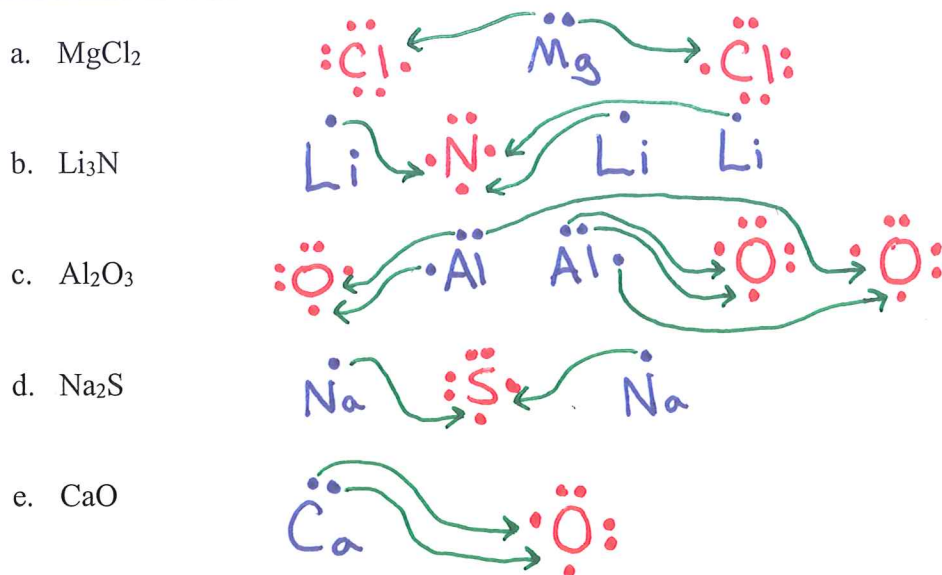


## Reviewing Ionic Bonding (Honors Chemistry)

**A. Circle the ion that has become pseudo-stable.**

- Which of the following is pseudo-stable?      Cr<sup>2+</sup>      Mn<sup>2+</sup>      Fe<sup>3+</sup>      **Zn<sup>2+</sup>**
- Which of the following is pseudo-stable?      Au<sup>2+</sup>      Ni<sup>2+</sup>      Fe<sup>2+</sup>      **Cd<sup>2+</sup>**
- Which of the following is pseudo-stable?      Cu<sup>2+</sup>      **Au<sup>+</sup>**      Co<sup>3+</sup>      V<sup>2+</sup>
- Which of the following is pseudo-stable?      Pt<sup>+</sup>      **Ag<sup>+</sup>**      Ir<sup>3+</sup>      Zn<sup>+</sup>
- Which of the following is pseudo-stable?      **Cu<sup>+</sup>**      Mn<sup>2+</sup>      Co<sup>2+</sup>      Mo<sup>2+</sup>

**B. Show the transfer of electrons between atoms when the following ionic compounds form.**



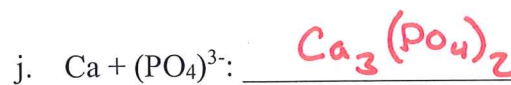
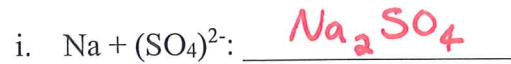
**C. What is the charge of the following atoms when they have a noble-gas configuration?**

- |                            |                            |                            |
|----------------------------|----------------------------|----------------------------|
| a. Na <u>1<sup>+</sup></u> | f. Se <u>2<sup>-</sup></u> | k. Ca <u>2<sup>+</sup></u> |
| b. F <u>1<sup>-</sup></u>  | g. K <u>1<sup>+</sup></u>  | l. Li <u>1<sup>+</sup></u> |
| c. Mg <u>2<sup>+</sup></u> | h. S <u>2<sup>-</sup></u>  | m. Cl <u>1<sup>-</sup></u> |
| d. Ga <u>3<sup>+</sup></u> | i. Al <u>3<sup>+</sup></u> | n. N <u>3<sup>-</sup></u>  |
| e. P <u>3<sup>-</sup></u>  | j. Si <u>4<sup>+</sup></u> | o. Br <u>1<sup>-</sup></u> |

D. Provide the atoms electron configuration (a) and the pseudo-stable electron configuration (b).



E. Put the following atoms and polyatomic ions together in the correct chemical formulas.



F. Use the chemical formulas to write the charges of the ions that formed them.

