

NAME: _____

Date: _____

Worksheet 6B Ionic Compounds (Nelson p.178-180)

- 1) Draw the **Bohr-Rutherford diagrams** to show how
- Potassium (K)** and **Fluorine (F)** combine to form **ionic compounds**.
 - Calcium (Ca)** and **Oxygen (O)** combine to form **ionic compounds**.

Metal	Metal	Non-metal	Non-metal	Chemical Formula
a) Potassium (K)		Fluorine (F)		
b) Sodium (Na)	Sodium (Na)	Oxygen (O)		

- 2) **Name the ion** and write the **ion symbols** for the following elements.

Element	Name of Ion	Ion Symbol	Element	Name of Ion	Ion Symbol
lithium	lithium	Li^{1+}	nitrogen	nitride	N^{3-}
sodium			phosphorus		
beryllium			oxygen		
magnesium			sulfur		
potassium			fluorine		
calcium			chlorine		
aluminum			bromine		

3) **Name** the following compounds:

- a) BeO _____
- b) Li₂S _____
- c) K₃P _____
- d) Na₃N _____
- e) MgCl₂ _____
- f) Ca₃P₂ _____
- g) LiBr _____
- h) Al₂O₃ _____

4) Use the **crisscross method** to write the formula for each compound:

- a) magnesium sulfide
- b) beryllium nitride
- c) Sodium fluoride
- d) lithium phosphide
- e) aluminum chloride
- f) barium oxide
- g) potassium bromide
- h) calcium iodide

5) Is **Mg₂O₂** a correct formula for **magnesium oxide**? Why or why not?
