

Name: _____
Blk: _____ Date: _____

Science 9
Names and Formulas of Ionic Compounds Continued

Steps for writing **simple ionic compounds using the criss-cross method:**

Steps	Example 1: Calcium chloride
1. Identify each ion (be sure to write down the charge) Always metal first non-metal second	<u>Ca²⁺</u> <u>Cl¹⁻</u>
2. Drop the (+) and (-) signs from the ion charge, then CRISS-CROSS them writing them as subscripts	Ca ² Cl ¹ Ca ₁ Cl ₂
3. Drop any 1's from the formula	CaCl ₂
4. Reduce subscripts (if possible): divide BOTH subscripts by the greatest common factor	NA
5. Write the final formula	CaCl ₂

Example 2: Lithium Fluoride

1. Li¹⁺ and F¹⁻
2. Li¹ and F¹

3. Li₁F₁

4. LiF

Example 3: Scandium nitride

1. Sc³⁺ and N³⁻
2. Sc³ and N³

3. Sc₃N₃

4. ScN

Now do the worksheets titled Writing Simple Formulas the criss-cross method and assignment #1