

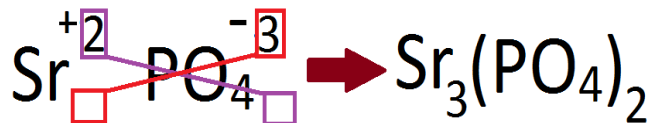
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## Writing Chemical Formulas – Crisscross Method

Physical Science Standard SPS2.b: Predict formulas for stable binary ionic compounds based on balance of charges

Directions: Write the formulas of the compounds produced from the following ions. Remember that

- ◆ Overall charge must equal zero.
  - If charges cancel, just write the symbols.
  - If not, crisscross the charges to find subscripts.
- ◆ Use parentheses when more than one polyatomic ion is needed.
- ◆ The metal (cation) MUST be written first in chemical formulas.



		S <sup>-2</sup>	Cl <sup>-1</sup>	N <sup>-3</sup>	SO <sub>3</sub> <sup>-2</sup>	PO <sub>4</sub> <sup>-3</sup>	NO <sub>3</sub> <sup>-1</sup>	SO <sub>4</sub> <sup>-2</sup>
1	Na <sup>+1</sup>			Na <sub>3</sub> N				
2	Sr <sup>+2</sup>					Sr <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>		
3	Ga <sup>+3</sup>		GaCl <sub>3</sub>					
4	K <sup>+1</sup>							
5	Mg <sup>+2</sup>							
6	Al <sup>+3</sup>							
7	H <sup>+1</sup>		HCl					
8	Fe <sup>+2</sup>							