

RULES

Naming Ionic Compounds

STEPS	EXAMPLE: CaF ₂
1. Name metal ion	Ca is calcium
2. Name nonmetal and change end to "ide"	F is fluorine ⇒ fluoride
3. Put it together	calcium fluoride

RULES

Writing Formulas for Ionic Compounds

Steps	Example: zinc nitride	Example: aluminum chloride
1. Identify each ion and its charge	zinc: Zn ²⁺ nitride: N ³⁻	aluminum: Al ³⁺ chloride: Cl ⁻
2. Total charges needed to balance the positive and negative ions	$\begin{array}{r} \text{Zn}^{2+} = +2 \quad +2 \quad +2 = +6 \\ \text{N}^{3-} = -3 \quad -3 \quad = -6 \\ \hline 0 \end{array}$	$\begin{array}{r} \text{Al}^{3+} = +3 \quad = +3 \\ \text{Cl}^{-} = -1 \quad -1 \quad -1 = -3 \\ \hline 0 \end{array}$
3. Ratio of positive to negative	3 Zn ²⁺ ions for every 2 N ³⁻ ions	1 Al ³⁺ ion for every 3 Cl ⁻ ions
4. State the formula	Zn ₃ N ₂	AlCl ₃

Naming Ionic Compounds Practice

Please use your notes to complete questions

1. AlI_3 _____

2. Na_2O _____

3. Mg_3P_2 _____

4. AgI _____

5. CaSe _____

6. K_2S _____

7. RbF _____

8. Ag_3N _____

9. KBr _____

10. Sr_3P_2 _____

11. CdS _____

12. Ag_2O _____

13. Cs_2S _____

14. CaI_2 _____

15. NaF _____

Writing Formulas of Ionic Compounds

Please use your notes to complete questions:

IONS	Total Charge	Ratio	Formula
Li ⁺ with Cl ⁻	Li ⁺ = Cl ⁻ =		
Ca ²⁺ with F ⁻			
Na ⁺ with S ²⁻			
Ca ²⁺ with S ²⁻			
Al ³⁺ with O ²⁻			
barium phosphide			
silver sulphide			
sodium nitride			
rubidium selenide			
cesium sulphide			
aluminum iodide			