

Worksheet #1: Binary Compounds and Polyatomic Salts

Name: _____

Part A: Write the correct formula for each of the following compounds:

1. magnesium nitride _____
2. aluminum hydrogen carbonate _____
3. carbon tetrabromide _____
4. sodium bromide _____
5. iron (III) chromate _____
6. boron trifluoride _____
7. plumbous chloride _____
8. nitrogen (III) chloride _____
9. silver oxalate _____
10. barium sulphide _____

Part B: Write the IUPAC name for each of the following formula:

1. NiCr_2O_7 _____
2. Ca_3P_2 _____
3. SnF_2 _____
4. HgBr _____
5. SiO_2 _____
6. $\text{Pt}(\text{HPO}_4)_2$ _____
7. SbCl_3 _____
8. N_2O_4 _____
9. P_2S_5 _____
10. $\text{V}(\text{C}_2\text{H}_3\text{O}_2)_5$ _____

Worksheet #2: Binary and Polyatomic Salts

Part I: Use the IUPAC method to name the following compounds:

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|---|---|
| 1. ZnS _____ | 2. Na ₂ O _____ |
| 3. CuBr ₂ _____ | 4. HgCl ₂ _____ |
| 5. As ₂ O ₃ _____ | 6. SbCl ₅ _____ |
| 7. Ag ₂ O _____ | 8. SiC _____ |
| 9. Al(OH) ₃ _____ | 10. Ag ₂ Cr ₂ O ₇ _____ |
| 11. Pt(C ₂ O ₄) ₂ _____ | 12. V ₃ (AsO ₃) ₂ _____ |

Part II: Use the Suffix Method to name the following:

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|-----------------------------|---|
| 1. SnO _____ | 2. FeCl ₂ _____ |
| 3. HgCrO ₄ _____ | 4. CuC ₂ H ₃ O ₂ _____ |

Part III: Use the Prefix Method to name the following:

- | | |
|--|---------------------------|
| 1. P ₂ S ₅ _____ | 2. CO ₂ _____ |
| 3. NCl ₃ _____ | 4. CBr ₄ _____ |

Part IV: Write the formula for each of the following:

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|----------------------------------|-------------------------------------|
| 1. silver iodide _____ | 2. aluminum oxide _____ |
| 3. calcium hydride _____ | 4. magnesium nitride _____ |
| 5. mercury (I) sulfide _____ | 6. nickel (II) bromide _____ |
| 7. manganese (IV) sulphide _____ | 8. chromium (VI) phosphide _____ |
| 9. ferric bromide _____ | 10. nitrogen dioxide _____ |
| 11. stannous fluoride _____ | 12. potassium permanganate _____ |
| 13. ammonium chloride _____ | 14. titanium (III) dichromate _____ |
| 15. gold (I) arsenate _____ | 16. antimony (III) phosphide _____ |