Mixed naming guidance:

First, identify if ionic or covalent.

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| --- | --- |
| Ionic – Metal and a non-metal  | Covalent – Both non-metals |
| **Things to remember:*** **Cation total charge must = anion total charge**
* **CATION MUST BE WRITTEN FIRST.**
* **Swap and drop when possible.**
* **If poly is more than 1 you must add ( ) before writing the subscript.**
* **Cation element name stays as is while the anion drops the ending to add “ide” for single anions and use the polyatomic name for any poly ions.**
* **Ide, ite, and ate endings a TOTALLY DIFFERENT FROM EACH OTHER.**
* **Be sure to find the transition metals and include the Roman Numeral!**
* **For transition metals THE ROMAN NUMERAL IS THE CHARGE!!!!**
 | Things to remember:* First element has a prefix denoting subscript or quantity with full element name EXCEPT FOR MONO. The quantity of 1, mono, is understood.
* Second element has a prefix denoting subscript or quantity with element ending in “ide”.
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**Ionic**

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| --- | --- | --- | --- |
| Cation | Anion | Compound Formula | Name of Compound |
| Sn4+ | Br1- | SnBr4 | Tin (IV) brom**ide** |
| Fe2+ | PO43- | Fe3(PO4)2 | Iron (II) phosph**ate** |
| Al3+ | NO21- | Al(NO2)3 | Aluminum nitr**ite** |
| NH41+ | S2- | (NH4)2S | Ammonium sulf**ide** |
| Sr2+ | SO42- | SrSO4 | Strontium sulf**ate**  |

**Covalent**

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| --- | --- |
| 1. trinitrogen pentaoxide N3O5 | 14. Si3O4 trisilicon tetrajydride |
| 2. diboran tetrachloride B2Cl4  | 15. P2S diphosphorus monosulfide |
| 3. phosphorus monohydride PH | 16. NBr3 nitrogen tribromide |
| 4. nanosilicon octaoxide Si9O8 | 17. P3N8 triphosphorus octanitride |
| 5. triarsenic hexabromide As3Br6 | 18. C2H9 dicarbon nanohydride |
| 6. dicarbon pentoxide C2O5 | 19. C3I5 tricarbon pentaiodide |
| 7. tetrasulfur hexanitride S4N6 | 20. SO2 sulfur dioxide |