

For each cation write the proper formula with charge. For each anion, write the proper formula with charge. Combine in proper (John Dalton) ratio, making a formula for the compound they form together. (no charges in the formulas, the compounds are NEUTRAL! Then, write the proper IUPAC name. One example...

| Cation                         | Anion                  | Formula                | Proper name       |
|--------------------------------|------------------------|------------------------|-------------------|
| Ammonium<br>$\text{NH}_4^{+1}$ | Cl<br>$\text{Cl}^{-1}$ | $\text{NH}_4\text{Cl}$ | Ammonium chloride |
| Ammonium                       | S                      |                        |                   |
| Ammonium                       | P                      |                        |                   |
| Beryllium                      | F                      |                        |                   |
| Magnesium                      | O                      |                        |                   |
| Calcium                        | N                      |                        |                   |
| Strontium                      | Nitrate                |                        |                   |
| Sodium                         | hydroxide              |                        |                   |
| Lithium                        | Chromate               |                        |                   |
| Potassium                      | Carbonate              |                        |                   |
| Aluminum                       | Iodine                 |                        |                   |
| Aluminum                       | Acetate                |                        |                   |

| Cation          | Anion        | Formula | Proper name |
|-----------------|--------------|---------|-------------|
| Niobium (V)     | Carbonate    |         |             |
| Bismuth (III)   | Perchlorate  |         |             |
| Bismuth (V)     | Chlorine     |         |             |
| Chromium (II)   | Sulfur       |         |             |
| Chromium (III)  | Sulfur       |         |             |
| Chromium (VI)   | Sulfur       |         |             |
| Zinc            | Hydroxide    |         |             |
| Manganese (VII) | Dichromate   |         |             |
| Silver          | Nitrogen     |         |             |
| Tungsten        | Oxygen       |         |             |
| Barium          | Sulfite      |         |             |
| Tin (II)        | Permanganate |         |             |
| Molybdenum      | Chlorine     |         |             |

| Cation          | Anion              | Formula | Proper name |
|-----------------|--------------------|---------|-------------|
| Vanadium (IV)   | Sulfur             |         |             |
| Zirconium       | Chlorine           |         |             |
| Lead (II)       | Phosphate          |         |             |
| Iridium (IV)    | Nitrate            |         |             |
| Manganese (VII) | Thiocyanate        |         |             |
| Tin (IV)        | Permanganate       |         |             |
| Mercury (II)    | Chlorate           |         |             |
| Lead (II)       | Nitrite            |         |             |
| Gold (III)      | Sulfate            |         |             |
| Scandium        | Nitrogen           |         |             |
| Ammonium        | Hydrogen carbonate |         |             |
| Tantalum        | Sulfur             |         |             |
| Palladium (II)  | Hydroxide          |         |             |