## Moles, Molecules, and Grams Worksheet

- 1) How many molecules are there in 24 grams of FeF<sub>3</sub>?
- 2) How many molecules are there in 450 grams of Na<sub>2</sub>SO<sub>4</sub>?
- 3) How many grams are there in  $2.3 \times 10^{24}$  atoms of silver?
- 4) How many grams are there in  $7.4 \times 10^{23}$  molecules of AgNO<sub>3</sub>?
- 5) How many grams are there in 7.5 x 10<sup>23</sup> molecules of H<sub>2</sub>SO<sub>4</sub>?
- 6) How many molecules are there in 122 grams of Cu(NO<sub>3</sub>)<sub>2</sub>?
- 7) How many grams are there in  $9.4 \times 10^{25}$  molecules of  $H_2$ ?
- 8) How many molecules are there in 230 grams of CoCl<sub>2</sub>?
- 9) How many molecules are there in 2.3 grams of NH<sub>4</sub>SO<sub>2</sub>?
- 10) How many grams are there in  $3.3 \times 10^{23}$  molecules of  $N_2I_6$ ?

## Percentage Composition Worksheet

Give the % composition of all elements in these compounds.

|    | ammonium sulfite     | % N       | 6)  | iron (II) phosphate     | % Fe       |
|----|----------------------|-----------|-----|-------------------------|------------|
|    |                      | % H       |     |                         | % P        |
|    |                      | % S       |     |                         | % O        |
|    |                      | % O       | 7)  | beryllium nitride %     | Be         |
| 2) | aluminum acetate     | % AI      |     | %                       | N          |
|    |                      | % C       | 8)  | potassium cyanide       | % K        |
|    |                      | % H       |     |                         | % C        |
|    |                      | % O       |     |                         | % N        |
| 3) | sodium bromide       | % Na      | 9)  | manganese (III) nitrate | % Mn       |
|    |                      | % Br      |     |                         | % N        |
| 4) | copper (II) hydroxid | de % Cu   |     |                         | % O        |
|    |                      | % O       | 10) | lithium phosphide %     | <br>Li     |
|    |                      | % H       |     | %                       | P <b>(</b> |
| 5) | magnesium carbor     | nate % Mg | 11) | nickel (III) sulfate %  | Ni         |
|    |                      | % C       |     | %                       | S          |
|    |                      | % O       |     | %                       | 0          |