

# Nomenclature Practice Sheet

## I. Name the following compounds:

- |                                 |                            |                               |
|---------------------------------|----------------------------|-------------------------------|
| 1. $\text{H}_2\text{CO}_3$ (aq) | 5. $\text{AlCl}_3$         | 9. $\text{CuI}_2$             |
| 2. $\text{Li}_2\text{S}$        | 6. $\text{BaI}_2$          | 10. $\text{H}_3\text{P}$ (aq) |
| 3. $\text{NaBr}$                | 7. $\text{Bi}_2\text{O}_5$ | 11. $\text{HBrO}_4$ (aq)      |
| 4. $\text{ZnCl}_2$              | 8. $\text{CdS}$            | 12. $\text{Sb}_2\text{O}_5$   |

## II. Write formulas for the following compounds:

- |                         |                         |
|-------------------------|-------------------------|
| 1. aluminum bromide     | 7. carbon disulfide     |
| 2. copper (I) oxide     | 8. carbon tetrachloride |
| 3. hydrogen sulfide     | 9. dinitrogen tetroxide |
| 4. iodic acid           | 10. hydroarsenic acid   |
| 5. nickel (III) nitride | 11. nitrous acid        |
| 6. potassium iodide     | 12. trisulfur pentoxide |

## III. Name the following compounds:

- |  |   |
|--|---|
| 1. $\text{AgNO}_3$                               | 9. $(\text{NH}_4)_2\text{CO}_3$           |
| 2. $\text{Cd}(\text{NO}_3)_2$                    | 10. $\text{BiPO}_3$                       |
| 3. $\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$ | 11. $\text{CS}_2$                         |
| 4. $\text{Fe}(\text{OH})_3$                      | 12. $\text{H}_2\text{C}_2\text{O}_4$ (aq) |
| 5. $\text{FeHPO}_4$                              | 13. $\text{H}_2\text{Se}$ (aq)            |
| 6. $\text{MgS}$                                  | 14. $\text{NH}_4\text{OH}$                |
| 7. $\text{MgSO}_3$                               | 15. $\text{Ni}(\text{HCO}_3)_3$           |
| 8. $\text{PbI}_4$                                | 16. $\text{Sn}(\text{NO}_2)_4$            |

## IV. Write formulas for the following compounds:

- |                          |                             |
|--------------------------|-----------------------------|
| 1. acetic acid           | 7. ammonium nitride         |
| 2. aluminum acetate      | 8. cobalt (II) hypochlorite |
| 3. barium sulfite        | 9. fluorous acid            |
| 4. calcium bromide       | 10. hydrofluoric acid       |
| 5. chromium (II) nitrate | 11. iron (II) permanganate  |
| 6. zinc sulfate          | 12. potassium chlorite      |

# Nomenclature Practice Sheet – Answer KEY

## I. Name the following compounds:

- |                                 |                 |                            |                   |                               |                      |
|---------------------------------|-----------------|----------------------------|-------------------|-------------------------------|----------------------|
| 1. $\text{H}_2\text{CO}_3$ (aq) | carbonic acid   | 5. $\text{AlCl}_3$         | aluminum chloride | 9. $\text{CuI}_2$             | copper (II) iodide   |
| 2. $\text{Li}_2\text{S}$        | lithium sulfide | 6. $\text{BaI}_2$          | barium iodide     | 10. $\text{H}_3\text{P}$ (aq) | hydrophosphoric acid |
| 3. $\text{NaBr}$                | sodium bromide  | 7. $\text{Bi}_2\text{O}_5$ | bismuth (V) oxide | 11. $\text{HBrO}_4$ (aq)      | perbromic acid       |
| 4. $\text{ZnCl}_2$              | zinc chloride   | 8. $\text{CdS}$            | cadmium sulfide   | 12. $\text{Sb}_2\text{O}_5$   | antimony (V) oxide   |

## II. Write formulas for the following compounds:

- |                         |                       |                         |                            |
|-------------------------|-----------------------|-------------------------|----------------------------|
| 1. aluminum bromide     | $\text{AlBr}_3$       | 7. carbon disulfide     | $\text{CS}_2$              |
| 2. copper (I) oxide     | $\text{Cu}_2\text{O}$ | 8. carbon tetrachloride | $\text{CCl}_4$             |
| 3. hydrogen sulfide     | $\text{H}_2\text{S}$  | 9. dinitrogen tetroxide | $\text{N}_2\text{O}_4$     |
| 4. iodic acid           | $\text{HIO}_3$ (aq)   | 10. hydroarsenic acid   | $\text{H}_3\text{As}$ (aq) |
| 5. nickel (III) nitride | $\text{NiN}$          | 11. nitrous acid        | $\text{HNO}_2$ (aq)        |
| 6. potassium iodide     | $\text{KI}$           | 12. trisulfur pentoxide | $\text{S}_3\text{O}_5$     |

## III. Name the following compounds:

- |  |                              |   |                                 |
|--|------------------------------|---|---------------------------------|
| 1. $\text{AgNO}_3$                               | silver nitrate               | 9. $(\text{NH}_4)_2\text{CO}_3$           | ammonium carbonate              |
| 2. $\text{Cd}(\text{NO}_3)_2$                    | cadmium (II) nitrate         | 10. $\text{BiPO}_3$                       | bismuth (III) phosphite         |
| 3. $\text{Fe}(\text{C}_2\text{H}_3\text{O}_2)_3$ | iron (III) acetate           | 11. $\text{CS}_2$                         | carbon disulfide                |
| 4. $\text{Fe}(\text{OH})_3$                      | iron (III) hydroxide         | 12. $\text{H}_2\text{C}_2\text{O}_4$ (aq) | oxalic acid                     |
| 5. $\text{FeHPO}_4$                              | iron (II) hydrogen phosphate | 13. $\text{H}_2\text{Se}$ (aq)            | hydroselenic acid               |
| 6. $\text{MgS}$                                  | magnesium sulfide            | 14. $\text{NH}_4\text{OH}$                | ammonium hydroxide              |
| 7. $\text{MgSO}_3$                               | magnesium sulfite            | 15. $\text{Ni}(\text{HCO}_3)_3$           | nickel (III) hydrogen carbonate |
| 8. $\text{PbI}_4$                                | lead (IV) iodide             | 16. $\text{Sn}(\text{NO}_2)_4$            | tin (IV) nitrite                |

## IV. Write formulas for the following compounds:

- |                          |   |                             |                             |
|--------------------------|---|-----------------------------|-----------------------------|
| 1. acetic acid           | $\text{HC}_2\text{H}_3\text{O}_2$             | 7. ammonium nitride         | $(\text{NH}_4)_3\text{N}$   |
| 2. aluminum acetate      | $\text{Al}(\text{C}_2\text{H}_3\text{O}_2)_3$ | 8. cobalt (II) hypochlorite | $\text{Co}(\text{ClO})_2$   |
| 3. barium sulfite        | $\text{BaSO}_3$                               | 9. fluorous acid            | $\text{HFO}_2$ (aq)         |
| 4. calcium bromide       | $\text{CaBr}_2$                               | 10. hydrofluoric acid       | $\text{HF}$ (aq)            |
| 5. chromium (II) nitrate | $\text{Cr}(\text{NO}_3)_2$                    | 11. iron (II) permanganate  | $\text{Fe}(\text{MnO}_4)_2$ |
| 6. zinc sulfate          | $\text{ZnSO}_4$                               | 12. potassium chlorite      | $\text{KClO}_2$             |