

Name: \_\_\_\_\_  
Hour: \_\_\_\_\_ Date: \_\_\_\_\_

### Chemistry: Ionic Binary Compounds: Multiple-Charge Cations

Write the name of each of the following compounds.

- |                                   |           |
|-----------------------------------|-----------|
| 1. CuF                            | 1. _____  |
| 2. CuF <sub>2</sub>               | 2. _____  |
| 3. Cr <sub>2</sub> O <sub>3</sub> | 3. _____  |
| 4. PbI <sub>2</sub>               | 4. _____  |
| 5. PbCl <sub>4</sub>              | 5. _____  |
| 6. CrO <sub>3</sub>               | 6. _____  |
| 7. AuBr                           | 7. _____  |
| 8. NiO                            | 8. _____  |
| 9. VI <sub>3</sub>                | 9. _____  |
| 10. SnO <sub>2</sub>              | 10. _____ |

Write the chemical formula for each of the given names.

- |                              |           |
|------------------------------|-----------|
| 11. manganese (VII) oxide    | 11. _____ |
| 12. niobium (V) chloride     | 12. _____ |
| 13. titanium (III) phosphide | 13. _____ |
| 14. palladium (IV) sulfide   | 14. _____ |
| 15. platinum (II) fluoride   | 15. _____ |
| 16. osmium (III) oxide       | 16. _____ |
| 17. iridium (IV) nitride     | 17. _____ |
| 18. cobalt (II) chloride     | 18. _____ |
| 19. iron (III) sulfide       | 19. _____ |
| 20. gold (III) iodide        | 20. _____ |

## Chemistry: Ionic Compounds: Formulas and Naming

Write the name of each of the following compounds.

- |                                       |           |
|---------------------------------------|-----------|
| 1. $\text{NH}_4\text{Cl}$             | 1. _____  |
| 2. $\text{NaC}_2\text{H}_3\text{O}_2$ | 2. _____  |
| 3. $\text{Ca}(\text{BrO}_3)_2$        | 3. _____  |
| 4. $\text{Pb}(\text{SO}_4)_2$         | 4. _____  |
| 5. $(\text{NH}_4)_3\text{N}$          | 5. _____  |
| 6. $\text{NH}_4\text{NO}_3$           | 6. _____  |
| 7. $\text{Sr}_3(\text{PO}_4)_2$       | 7. _____  |
| 8. $\text{BaSO}_4$                    | 8. _____  |
| 9. $\text{AgIO}_3$                    | 9. _____  |
| 10. $\text{KCN}$                      | 10. _____ |
| 11. $\text{AuNO}_3$                   | 11. _____ |

Write the chemical formula for each of the given names.

- |                           |           |
|---------------------------|-----------|
| 12. sodium cyanide        | 12. _____ |
| 13. barium nitrate        | 13. _____ |
| 14. ammonium sulfate      | 14. _____ |
| 15. titanium (II) cyanide | 15. _____ |
| 16. calcium phosphate     | 16. _____ |
| 17. cesium carbonate      | 17. _____ |
| 18. iron (III) acetate    | 18. _____ |
| 19. calcium sulfide       | 19. _____ |
| 20. beryllium bicarbonate | 20. _____ |
| 21. rubidium iodate       | 21. _____ |
| 22. copper (II) fluoride  | 22. _____ |
| 23. chromium (VI) oxide   | 23. _____ |

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**Chemistry: Ionic Formulas (Binary, Polyatomic, Transition Metals)**

Write the formula for each of the following compounds.

- |                          |           |
|--------------------------|-----------|
| 1. sodium iodide         | 1. _____  |
| 2. mercury (II) sulfate  | 2. _____  |
| 3. lead (II) phosphate   | 3. _____  |
| 4. ammonium sulfide      | 4. _____  |
| 5. aluminum chloride     | 5. _____  |
| 6. copper (I) carbonate  | 6. _____  |
| 7. manganese (IV) oxide  | 7. _____  |
| 8. potassium sulfate     | 8. _____  |
| 9. iron (III) oxide      | 9. _____  |
| 10. magnesium nitrate    | 10. _____ |
| 11. calcium sulfide      | 11. _____ |
| 12. potassium cyanide    | 12. _____ |
| 13. magnesium chloride   | 13. _____ |
| 14. chromium (III) oxide | 14. _____ |
| 15. gold (III) bromide   | 15. _____ |
| 16. beryllium fluoride   | 16. _____ |
| 17. zinc (II) sulfide    | 17. _____ |
| 18. lithium oxide        | 18. _____ |
| 19. aluminum nitrate     | 19. _____ |
| 20. iron (II) phosphide  | 20. _____ |
| 21. magnesium nitrate    | 21. _____ |
| 22. calcium nitrate      | 22. _____ |
| 23. lead (II) chloride   | 23. _____ |
| 24. tin (IV) hydroxide   | 24. _____ |
| 25. sodium oxide         | 25. _____ |

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### Chemistry: Ionic Binary Compounds: Single-Charge

Write the name of each of the following compounds.

1.  $\text{Na}_2\text{S}$
2.  $\text{Al}_2\text{O}_3$
3.  $\text{NaCl}$
4.  $\text{RbI}$
5.  $\text{ZnBr}_2$
6.  $\text{AgCl}$
7.  $\text{BN}$
8.  $\text{BaF}_2$
9.  $\text{Sr}_3\text{N}_2$
10.  $\text{MgCl}_2$

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

Write the chemical formula for each of the given names.

11. magnesium nitride
12. calcium oxide
13. silver fluoride
14. beryllium chloride
15. potassium iodide
16. aluminum chloride
17. zinc oxide
18. barium bromide
19. lithium nitride
20. potassium sulfide

11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_
20. \_\_\_\_\_

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### Chemistry: Covalent Binary Compounds: Nonmetal–Nonmetal Combinations

Write the name of each of the following compounds.

- |                                    |           |
|------------------------------------|-----------|
| 1. HF                              | 1. _____  |
| 2. H <sub>2</sub> S                | 2. _____  |
| 3. NO                              | 3. _____  |
| 4. N <sub>2</sub> O                | 4. _____  |
| 5. NO <sub>2</sub>                 | 5. _____  |
| 6. N <sub>2</sub> O <sub>5</sub>   | 6. _____  |
| 7. SO <sub>2</sub>                 | 7. _____  |
| 8. CBr <sub>4</sub>                | 8. _____  |
| 9. C <sub>2</sub> H <sub>6</sub>   | 9. _____  |
| 10. C <sub>4</sub> H <sub>10</sub> | 10. _____ |

Write the chemical formula for each of the given names.

- |                            |           |
|----------------------------|-----------|
| 11. nitrogen triiodide     | 11. _____ |
| 12. dinitrogen tetroxide   | 12. _____ |
| 13. sulfur trioxide        | 13. _____ |
| 14. carbon monoxide        | 14. _____ |
| 15. dihydrogen monoxide    | 15. _____ |
| 16. hydrogen monobromide   | 16. _____ |
| 17. phosphorus trichloride | 17. _____ |
| 18. tricarbon octahydride  | 18. _____ |
| 19. carbon tetrahydride    | 19. _____ |
| 20. dicarbon tetrahydride  | 20. _____ |

