

## ANSWER KEY

**EXTRA PRACTICE: Naming & Writing Ionic Compounds**

Name \_\_\_\_\_

Date \_\_\_\_\_ Pd \_\_\_\_\_

|    | Name of Cation       | Name of Anion | Formula of Cation | Formula of Anion | Formula of Compound   | Name of Compound     |
|----|----------------------|---------------|-------------------|------------------|-----------------------|----------------------|
| 1  | Calcium Cation       | Chloride      | $\text{Ca}^{2+}$  | $\text{Cl}^-$    | $\text{CaCl}_2$       | Calcium Chloride     |
| 2  | Iron (III) Cation    | Phosphide     | $\text{Fe}^{3+}$  | $\text{P}^{3-}$  | $\text{FeP}$          | Iron (III) Phosphide |
| 3  | Sodium Cation        | Sulfide       | $\text{Na}^{1+}$  | $\text{S}^{2-}$  | $\text{Na}_2\text{S}$ | Sodium Sulfide       |
| 4  | Aluminum Cation      | Bromide       | $\text{Al}^{3+}$  | $\text{Br}^{1-}$ | $\text{AlBr}_3$       | Aluminum Bromide     |
| 5  | Lithium Cation       | Nitride       | $\text{Li}^+$     | $\text{N}^{3-}$  | $\text{Li}_3\text{N}$ | Lithium Nitride      |
| 6  | Platinum (IV) Cation | Oxide         | $\text{Pt}^{4+}$  | $\text{O}^{2-}$  | $\text{PtO}_2$        | Platinum (IV) Oxide  |
| 7  | Magnesium Cation     | Selenide      | $\text{Mg}^{2+}$  | $\text{Se}^{2-}$ | $\text{MgSe}$         | Magnesium Selenide   |
| 8  | Calcium Cation       | Fluoride      | $\text{Ca}^{2+}$  | $\text{F}^{1-}$  | $\text{CaF}_2$        | Calcium Fluoride     |
| 9  | Mercury (II) Cation  | Sulfide       | $\text{Hg}^{2+}$  | $\text{S}^{2-}$  | $\text{HgS}$          | Mercury (II) Sulfide |
| 10 | Copper (II) Cation   | Iodide        | $\text{Cu}^{2+}$  | $\text{I}^-$     | $\text{CuI}_2$        | Copper (II) Iodide   |

Name the following ionic compounds:

- 1) NaBr = Sodium Bromide
- 2) ScCl<sub>3</sub> = Scandium (III) Chloride
- 3) V<sub>2</sub>O<sub>3</sub> = Vanadium (III) Oxide
- 4) NaF = Sodium Fluoride
- 5) Ca<sub>3</sub>P<sub>2</sub> = Calcium Phosphide
- 6) FeSe<sub>2</sub> = Iron (IV) Selenide
- 7) Li<sub>3</sub>P = Lithium Phosphide
- 8) Zn<sub>3</sub>P<sub>2</sub> = Zinc Phosphide
- 9) Sr<sub>3</sub>N<sub>2</sub> = Strontium Nitride
- 10) CuO = Copper (II) Oxide
- 11) AgI = Silver Iodide
- 12) AlCl<sub>3</sub> = Aluminum Chloride
- 13) SnS<sub>2</sub> = Tin (IV) Sulfide
- 14) PbF<sub>4</sub> = Lead (IV) Fluoride
- 15) K<sub>2</sub>Se = Potassium Selenide
- 16) Pb<sub>3</sub>N<sub>2</sub> = Lead (II) Nitride
- 17) Ni<sub>3</sub>P<sub>2</sub> = Nickel (II) Phosphide
- 18) CdS = Cadmium Sulfide
- 19) CuCl<sub>2</sub> = Copper (II) Chloride
- 20) FeBr<sub>2</sub> = Iron (II) Bromide

Write the formulas for the following ionic compounds:

- 21) lithium iodide =  $\text{Li}^{+1} \text{I}^{-1}$  LiI
- 22) iron (II) sulfide =  $\text{Fe}^{2+} \text{S}^{2-}$  FeS
- 23) titanium (II) selenide =  $\text{Ti}^{2+} \text{Se}^{2-}$  TiSe
- 24) calcium bromide =  $\text{Ca}^{2+} \text{Br}^{-}$  CaBr<sub>2</sub>
- 25) gallium chloride =  $\text{Ga}^{3+} \text{Cl}^{-}$  GaCl<sub>3</sub>
- 26) sodium nitride =  $\text{Na}^{+} \text{N}^{3-}$  Na<sub>3</sub>N
- 27) beryllium phosphide =  $\text{Be}^{2+} \text{P}^{3-}$  Be<sub>3</sub>P<sub>2</sub>
- 28) zinc oxide =  $\text{Zn}^{2+} \text{O}^{2-}$  ZnO
- 29) manganese (VII) selenide =  $\text{Mn}^{7+} \text{Se}^{2-}$  Mn<sub>2</sub>Se<sub>7</sub>
- 30) copper (II) chloride =  $\text{Cu}^{2+} \text{Cl}^{-}$  CuCl<sub>2</sub>
- 31) cobalt (III) sulfide =  $\text{Co}^{3+} \text{S}^{2-}$  Co<sub>2</sub>S<sub>3</sub>
- 32) cadmium oxide =  $\text{Cd}^{2+} \text{O}^{2-}$  CdO
- 33) potassium nitride =  $\text{K}^{+} \text{N}^{3-}$  K<sub>3</sub>N
- 34) lead (IV) sulfide =  $\text{Pb}^{4+} \text{S}^{2-}$  PbS<sub>2</sub>
- 35) silver chloride =  $\text{Ag}^{+} \text{Cl}^{-}$  AgCl
- 36) vanadium (V) nitride =  $\text{V}^{5+} \text{N}^{3-}$  V<sub>3</sub>N<sub>5</sub>
- 37) strontium fluoride =  $\text{Sr}^{2+} \text{F}^{-}$  SrF<sub>2</sub>
- 38) barium sulfide =  $\text{Ba}^{2+} \text{S}^{2-}$  BaS
- 39) platinum (II) oxide =  $\text{Pt}^{2+} \text{O}^{2-}$  PtO
- 40) magnesium phosphide =  $\text{Mg}^{2+} \text{P}^{3-}$  Mg<sub>3</sub>P<sub>2</sub>