

# ANSWER KEY

## NAMING IONIC COMPOUNDS

Name \_\_\_\_\_

Name the following compounds using the Stock Naming System.

1.  $\text{CaCO}_3$  Calcium carbonate
2.  $\text{KCl}$  potassium chloride
3.  $\text{FeSO}_4$  iron (II) sulfate
4.  $\text{LiBr}$  lithium bromide
5.  $\text{MgCl}_2$  magnesium chloride
6.  $\text{FeCl}_3$  iron (III) chloride
7.  $\text{Zn}_3(\text{PO}_4)_2$  zinc phosphate
8.  $\text{NH}_4\text{NO}_3$  ammonium nitrate
9.  $\text{Al}(\text{OH})_3$  aluminum hydroxide
10.  $\text{CuC}_2\text{H}_3\text{O}_2$  copper (I) acetate
11.  $\text{PbSO}_3$  lead (II) sulfite
12.  $\text{NaClO}_3$  sodium chlorate
13.  $\text{CaC}_2\text{O}_4$  calcium oxalate
14.  $\text{Fe}_2\text{O}_3$  iron (III) oxide
15.  $(\text{NH}_4)_3\text{PO}_4$  ammonium phosphate
16.  $\text{NaHSO}_4$  sodium hydrogen sulfate (or sodium bisulfate)
17.  $\text{Hg}_2\text{Cl}_2$  mercury (I) chloride
18.  $\text{Mg}(\text{NO}_3)_2$  magnesium nitrate
19.  $\text{CuSO}_4$  copper (II) sulfate
20.  $\text{NaHCO}_3$  sodium hydrogen carbonate (or sodium bicarbonate)
21.  $\text{NiBr}_3$  nickel (III) bromide
22.  $\text{Be}(\text{NO}_3)_2$  beryllium nitrate
23.  $\text{ZnSO}_4$  zinc sulfate
24.  $\text{AuCl}_3$  gold (III) chloride
25.  $\text{KMnO}_4$  potassium permanganate

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## NAMING MOLECULAR COMPOUNDS

Name \_\_\_\_\_

Name the following covalent compounds.

1.  $\text{CO}_2$  Carbon dioxide
2.  $\text{CO}$  carbon monoxide
3.  $\text{SO}_2$  sulfur dioxide
4.  $\text{SO}_3$  sulfur trioxide
5.  $\text{N}_2\text{O}$  dinitrogen monoxide
6.  $\text{NO}$  nitrogen monoxide
7.  $\text{N}_2\text{O}_3$  dinitrogen trioxide
8.  $\text{NO}_2$  nitrogen dioxide
9.  $\text{N}_2\text{O}_4$  dinitrogen tetroxide
10.  $\text{N}_2\text{O}_5$  dinitrogen pentoxide
11.  $\text{PCl}_3$  phosphorus trichloride
12.  $\text{PCl}_5$  phosphorus pentachloride
13.  $\text{NH}_3$  Ammonia
14.  $\text{SCl}_6$  Sulfur hexachloride
15.  $\text{P}_2\text{O}_5$  diphosphorus pentoxide
16.  $\text{CCl}_4$  Carbon tetrachloride
17.  $\text{SiO}_2$  Silicon dioxide
18.  $\text{CS}_2$  Carbon disulfide
19.  $\text{OF}_2$  oxygen difluoride
20.  $\text{PBr}_3$  phosphorus tribromide

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## NAMING ACIDS

Name \_\_\_\_\_

Name the following acids.

1.  $\text{HNO}_3$  nitric acid
2.  $\text{HCl}$  hydrochloric acid
3.  $\text{H}_2\text{SO}_4$  sulfuric acid
4.  $\text{H}_2\text{SO}_3$  sulfurous acid
5.  $\text{HC}_2\text{H}_3\text{O}_2$  acetic acid
6.  $\text{HBr}$  hydrobromic acid
7.  $\text{HNO}_2$  nitrous acid
8.  $\text{H}_3\text{PO}_4$  phosphoric acid
9.  $\text{H}_2\text{S}$  hydrosulfuric acid
10.  $\text{H}_2\text{CO}_3$  carbonic acid

Write the formulas of the following acids.

11. sulfuric acid  $\text{H}_2\text{SO}_4$
12. nitric acid  $\text{HNO}_3$
13. hydrochloric acid  $\text{HCl}$
14. acetic acid  $\text{HC}_2\text{H}_3\text{O}_2$
15. hydrofluoric acid  $\text{HF}$
16. phosphorous acid  $\text{H}_3\text{PO}_3$
17. carbonic acid  $\text{H}_2\text{CO}_3$
18. nitrous acid  $\text{HNO}_2$
19. phosphoric acid  $\text{H}_3\text{PO}_4$
20. hydrosulfuric acid  $\text{H}_2\text{S}$

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## WRITING FORMULAS FROM NAMES

Name \_\_\_\_\_

Write the formulas of the following compounds.

1. ammonium phosphate  $(\text{NH}_4)_3\text{PO}_4$
2. iron (II) oxide  $\text{FeO}$
3. iron (III) oxide  $\text{Fe}_2\text{O}_3$
4. carbon monoxide  $\text{CO}$
5. calcium chloride  $\text{CaCl}_2$
6. potassium nitrate  $\text{KNO}_3$
7. magnesium hydroxide  $\text{Mg}(\text{OH})_2$
8. aluminum sulfate  $\text{Al}_2(\text{SO}_4)_3$
9. copper (II) sulfate  $\text{CuSO}_4$
10. lead (IV) chromate  $\text{Pb}(\text{CrO}_4)_2$
11. diphosphorus pentoxide  $\text{P}_2\text{O}_5$
12. potassium permanganate  $\text{KMnO}_4$
13. sodium hydrogen carbonate  $\text{NaHCO}_3$
14. zinc nitrate  $\text{Zn}(\text{NO}_3)_2$
15. aluminum sulfite  $\text{Al}_2(\text{SO}_3)_3$

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