

# KEY

Write the correct formula for the compound formed by each of the following ion pairs.

1.  $\text{NH}_4^+$  and  $\text{S}^{2-}$   $(\text{NH}_4)_2\text{S}$
2.  $\text{Al}^{3+}$  and  $\text{CrO}_4^{2-}$   $\text{Al}_2(\text{CrO}_4)_3$
3.  $\text{Mg}^{2+}$  and  $\text{ClO}_3^-$   $\text{Mg}(\text{ClO}_3)_2$
4.  $\text{Ca}^{2+}$  and  $\text{PO}_4^{3-}$   ~~$\text{Ca}_2(\text{PO}_4)_3$~~   $\text{Ca}_3(\text{PO}_4)_2$

Name the following compounds.

5.  $\text{Na}_2\text{S}$  Sodium Sulfide
6.  $\text{NH}_4\text{NO}_2$  Ammonium Nitrite
7.  $\text{MgBr}_2$  Magnesium Bromide
8.  $\text{PbSO}_4$  Lead(II) Sulfate
9.  $\text{CuF}_2$  Copper(II) fluoride
10.  $\text{N}_2\text{O}_4$  dinitrogen tetroxide
11.  $\text{P}_2\text{O}_5$  diphosphorous pentoxide

Write balanced formulas for each of the following compounds.

12. Copper (II) chloride  $\text{Cu}^{2+} \text{Cl}^-$   $\text{CuCl}_2$
13. Ammonium sulfate  $\text{NH}_4^+ \text{SO}_4^{2-}$   $(\text{NH}_4)_2\text{SO}_4$
14. trinitrogen monoxide  $\text{N}_3\text{O}$
15. diphosphorus pentoxide  $\text{P}_2\text{O}_5$
16. magnesium chloride  $\text{Mg}^{2+} \text{O}^{2-}$   $\text{MgO}$
17. lead (IV) oxide  $\text{Pb}^{4+} \text{O}^{2-}$   $\text{Pb}_2\text{O}_4 \Rightarrow \text{PbO}_2$
18. potassium arsenate  $\text{K}^+ \text{AsO}_3^{3-}$   $\text{K}_3\text{AsO}_3$
19. calcium cyanide  $\text{Ca}^{2+} \text{CN}^-$   $\text{Ca}(\text{CN})_2$
20. hexachlorine dibromide  $\text{Cl}_6\text{Br}_2$