Name

Period\_\_\_\_

## **Balancing Equations Practice**

Balance the following equations by placing the appropriate coefficient on the lines.

1) 
$$\underline{\hspace{1cm}} Ag + \underline{\hspace{1cm}} S_8 \rightarrow \underline{\hspace{1cm}} Ag_2S$$

2) \_\_\_ Al + \_\_\_ 
$$O_2 \rightarrow$$
 \_\_\_ Al<sub>2</sub> $O_3$ 

3) 
$$\underline{\hspace{1cm}}$$
 Al +  $\underline{\hspace{1cm}}$  Br<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  Al<sub>2</sub>Br<sub>6</sub>

4) 
$$\underline{\hspace{1cm}}$$
 Al +  $\underline{\hspace{1cm}}$  Cl<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  AlCl<sub>3</sub>

5) 
$$\underline{\qquad}$$
 Br<sub>2</sub>+ $\underline{\qquad}$  Ca  $\rightarrow$   $\underline{\qquad}$  CaBr<sub>2</sub>

6) 
$$\underline{\hspace{1cm}}$$
 KClO<sub>3</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  KCl +  $\underline{\hspace{1cm}}$  O<sub>2</sub>

7) 
$$\underline{\qquad} K_2S + \underline{\qquad} O_2 \rightarrow \underline{\qquad} K_2SO_3$$

8) 
$$\underline{\hspace{1cm}}$$
 NO +  $\underline{\hspace{1cm}}$  O<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  NO<sub>2</sub>

9) 
$$\underline{\hspace{1cm}} O_2 + \underline{\hspace{1cm}} S \rightarrow \underline{\hspace{1cm}} SO_2$$

$$10) \underline{\hspace{1cm}} O_2 + \underline{\hspace{1cm}} S_8 \rightarrow \underline{\hspace{1cm}} SO_2$$

11) 
$$\underline{\hspace{1cm}}$$
 CaF<sub>2</sub> +  $\underline{\hspace{1cm}}$  H<sub>2</sub>SO<sub>4</sub> $\rightarrow$   $\underline{\hspace{1cm}}$  HF +  $\underline{\hspace{1cm}}$  CaSO<sub>4</sub>

12) 
$$\_$$
  $CCl_4 + \_$   $HF \rightarrow \_$   $CCl_2F_2 + \_$   $HCl$ 

13) 
$$\_$$
 CdCl<sub>2</sub>+  $\_$  NaOH $\rightarrow$   $\_$  Cd(OH)<sub>2</sub>+  $\_$  NaCl

14) \_\_\_ 
$$C_3H_8 +$$
\_\_  $O_2 \rightarrow$ \_\_  $CO_2 +$ \_\_  $H_2O$ 

15) 
$$\_\_$$
 CH<sub>4</sub> +  $\_\_$  H<sub>2</sub>O  $\rightarrow$   $\_\_$  CO<sub>2</sub> +  $\_\_$  H<sub>2</sub>

16) 
$$\underline{\hspace{1cm}}$$
 Eu +  $\underline{\hspace{1cm}}$  HF $\rightarrow$   $\underline{\hspace{1cm}}$  EuF<sub>3</sub> +  $\underline{\hspace{1cm}}$  H<sub>2</sub>

17) 
$$\_$$
 FeCl<sub>2</sub>+  $\_$  NaOH $\rightarrow$  Fe(OH)<sub>2</sub>+  $\_$  NaCl

18) 
$$\_$$
 HCl +  $\_$  NaOH $\rightarrow$   $\_$  NaCl +  $\_$  H<sub>2</sub>O

19) 
$$\underline{\hspace{1cm}}$$
 HCl +  $\underline{\hspace{1cm}}$  Mg(OH)<sub>2</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  MgCl<sub>2</sub> +  $\underline{\hspace{1cm}}$  H<sub>2</sub>O

20) \_\_\_ HF + \_\_\_ 
$$UO_2 \rightarrow$$
 \_\_\_  $UF_4 +$  \_\_\_  $H_2O$ 

21) \_\_\_ HCl + \_\_\_ Zn
$$\rightarrow$$
 \_\_\_ H<sub>2</sub> + \_\_\_ ZnCl<sub>2</sub>

22) 
$$\underline{\hspace{1cm}}$$
 H<sub>2</sub>O +  $\underline{\hspace{1cm}}$  TiCl<sub>4</sub>  $\rightarrow$   $\underline{\hspace{1cm}}$  TiO<sub>2</sub> +  $\underline{\hspace{1cm}}$  HCl

23) \_\_\_ CaO + \_\_\_ NH<sub>4</sub>Cl 
$$\rightarrow$$
 \_\_\_ NH<sub>3</sub> + \_\_\_ H<sub>2</sub>O + \_\_\_ CaCl<sub>2</sub>

24) \_\_\_ 
$$HNO_3 +$$
\_\_  $Na_2CO_3 \rightarrow$ \_\_  $NaNO_3 +$ \_\_  $H_2O +$ \_\_  $CO_2$ 

25) \_\_\_ 
$$HCl +$$
\_\_  $MnO_2 \rightarrow$ \_\_  $MnCl_2 +$ \_\_  $Cl_2 +$ \_\_  $H_2O$ 

26) \_\_\_ 
$$H_2O$$
 + \_\_\_  $NaCl$   $\rightarrow$  \_\_\_  $H_2$  + \_\_\_  $Cl_2$  + \_\_\_  $NaOH$ 

27) \_\_\_ 
$$H_2O +$$
 \_\_\_  $NaOH +$  \_\_\_  $Sn \rightarrow$  \_\_\_  $H_2 +$  \_\_\_  $Na_2SnO_3$ 

28) \_\_\_ 
$$H_2SO_4 +$$
 \_\_\_  $NaBH_4 \rightarrow$  \_\_\_  $H_2 +$  \_\_\_  $Na_2SO_4 +$  \_\_\_  $B_2H_6$ 

29) \_\_\_\_ 
$$I_2$$
 + \_\_\_\_  $NaBH_4 \rightarrow$  \_\_\_\_  $B_2H_6$  + \_\_\_\_  $NaI$  + \_\_\_\_  $H_2$ 

30) \_\_\_ NaF + \_\_\_ 
$$SCl_2 \rightarrow$$
 \_\_\_  $SF_4 +$  \_\_\_  $S_2Cl_2 +$  \_\_\_ NaCl