Name:

Date:

## **Balancing Chemical Equations**

Balance the following chemical equations.

1. 
$$\underline{1}$$
  $V_2O_5$  +  $\underline{6}$  HCl  $\longrightarrow$   $\underline{2}$  VOCl<sub>3</sub> +  $\underline{3}$  H<sub>2</sub>O

2. 
$$\underline{2}$$
 CH<sub>4</sub> +  $\underline{7}$  O<sub>2</sub>  $\longrightarrow$   $\underline{6}$  CO<sub>2</sub> +  $\underline{4}$  H<sub>2</sub>O

3. 
$$\underline{1}$$
 Xe +  $\underline{3}$  F<sub>2</sub>  $\longrightarrow$   $\underline{1}$  XeF<sub>6</sub>

4. 
$$\underline{2}$$
  $H_2SO_4$  +  $\underline{1}$   $Pb(OH)_4$   $\longrightarrow$   $\underline{1}$   $Pb(SO_4)_2$  +  $\underline{4}$   $H_2O$ 

5. 
$$\underline{1}$$
 PCI<sub>5</sub> +  $\underline{4}$  H<sub>2</sub>O  $\longrightarrow$   $\underline{1}$  H<sub>3</sub>PO<sub>4</sub> +  $\underline{5}$  HCI

6. 
$$\underline{2}$$
 KNO<sub>3</sub> +  $\underline{1}$  H<sub>2</sub>CO<sub>3</sub>  $\longrightarrow$   $\underline{1}$  K<sub>2</sub>CO<sub>3</sub> +  $\underline{2}$  HNO<sub>3</sub>

7. 
$$\underline{2}$$
 BF<sub>3</sub> +  $\underline{3}$  Li<sub>2</sub>SO<sub>3</sub>  $\longrightarrow$   $\underline{1}$  B<sub>2</sub>(SO<sub>3</sub>)<sub>3</sub> +  $\underline{6}$  LiF

8. 
$$\underline{2}$$
  $N_2(g)$  +  $\underline{5}$   $O_2(g)$   $\longrightarrow$   $\underline{2}$   $H_2O$  +  $\underline{4}$   $HNO_3(aq)$ 

9. 
$$\underline{2}$$
 NH<sub>4</sub>NO<sub>3</sub>  $\longrightarrow$   $\underline{2}$  N<sub>2</sub> +  $\underline{1}$  O<sub>2</sub> +  $\underline{1}$  H<sub>2</sub>O

10. 
$$\underline{1}$$
 Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> +  $\underline{2}$  H<sub>2</sub>SO<sub>4</sub>  $\longrightarrow$   $\underline{2}$  CaSO<sub>4</sub> +  $\underline{1}$  Ca(H<sub>2</sub>PO<sub>4</sub>)<sub>2</sub>