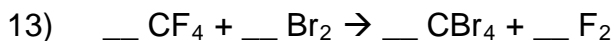
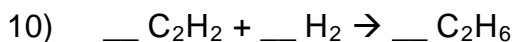
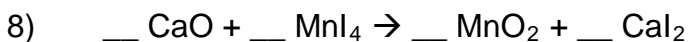
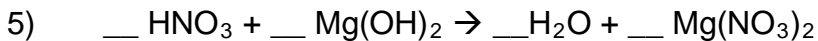
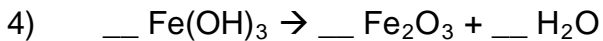
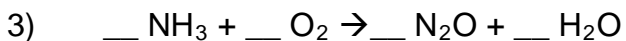
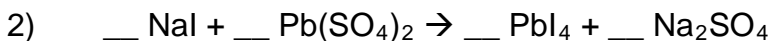
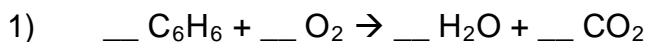


Balance the following equations.



Name: \_\_\_\_\_

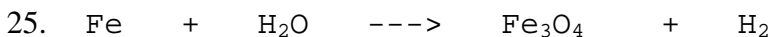
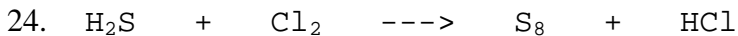
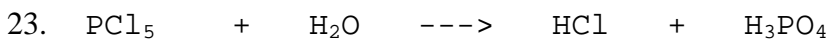
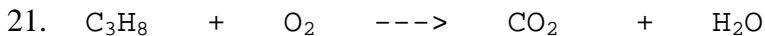
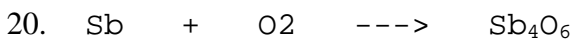
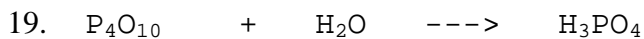
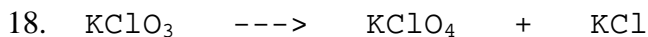
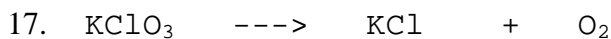
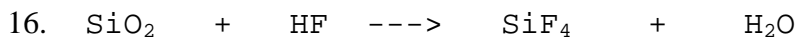
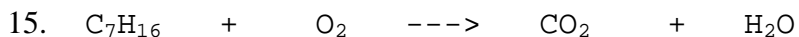
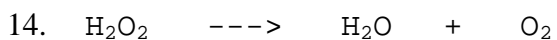
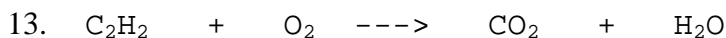
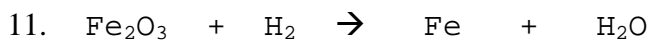
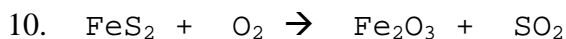
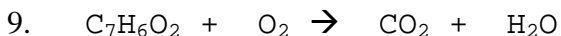
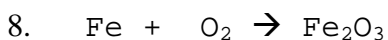
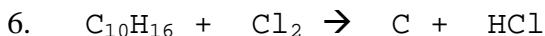
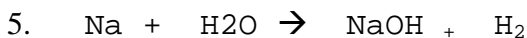
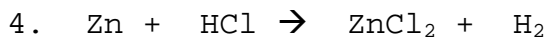
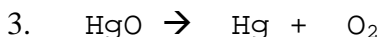
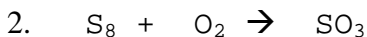
## **Balancing Chemical Equations**

*Balance the equations below:*

- 1)    \_\_\_\_  $\text{N}_2$  + \_\_\_\_  $\text{H}_2 \rightarrow$  \_\_\_\_  $\text{NH}_3$
- 2)    \_\_\_\_  $\text{KClO}_3 \rightarrow$  \_\_\_\_  $\text{KCl}$  + \_\_\_\_  $\text{O}_2$
- 3)    \_\_\_\_  $\text{NaCl}$  + \_\_\_\_  $\text{F}_2 \rightarrow$  \_\_\_\_  $\text{NaF}$  + \_\_\_\_  $\text{Cl}_2$
- 4)    \_\_\_\_  $\text{H}_2$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{H}_2\text{O}$
- 5)    \_\_\_\_  $\text{Pb}(\text{OH})_2$  + \_\_\_\_  $\text{HCl} \rightarrow$  \_\_\_\_  $\text{H}_2\text{O}$  + \_\_\_\_  $\text{PbCl}_2$
- 6)    \_\_\_\_  $\text{AlBr}_3$  + \_\_\_\_  $\text{K}_2\text{SO}_4 \rightarrow$  \_\_\_\_  $\text{KBr}$  + \_\_\_\_  $\text{Al}_2(\text{SO}_4)_3$
- 7)    \_\_\_\_  $\text{CH}_4$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{CO}_2$  + \_\_\_\_  $\text{H}_2\text{O}$
- 8)    \_\_\_\_  $\text{C}_3\text{H}_8$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{CO}_2$  + \_\_\_\_  $\text{H}_2\text{O}$
- 9)    \_\_\_\_  $\text{C}_8\text{H}_{18}$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{CO}_2$  + \_\_\_\_  $\text{H}_2\text{O}$
- 10)    \_\_\_\_  $\text{FeCl}_3$  + \_\_\_\_  $\text{NaOH} \rightarrow$  \_\_\_\_  $\text{Fe}(\text{OH})_3$  + \_\_\_\_  $\text{NaCl}$
- 11)    \_\_\_\_  $\text{P}$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{P}_2\text{O}_5$
- 12)    \_\_\_\_  $\text{Na}$  + \_\_\_\_  $\text{H}_2\text{O} \rightarrow$  \_\_\_\_  $\text{NaOH}$  + \_\_\_\_  $\text{H}_2$
- 13)    \_\_\_\_  $\text{Ag}_2\text{O} \rightarrow$  \_\_\_\_  $\text{Ag}$  + \_\_\_\_  $\text{O}_2$
- 14)    \_\_\_\_  $\text{S}_8$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{SO}_3$
- 15)    \_\_\_\_  $\text{CO}_2$  + \_\_\_\_  $\text{H}_2\text{O} \rightarrow$  \_\_\_\_  $\text{C}_6\text{H}_{12}\text{O}_6$  + \_\_\_\_  $\text{O}_2$
- 16)    \_\_\_\_  $\text{K}$  + \_\_\_\_  $\text{MgBr} \rightarrow$  \_\_\_\_  $\text{KBr}$  + \_\_\_\_  $\text{Mg}$
- 17)    \_\_\_\_  $\text{HCl}$  + \_\_\_\_  $\text{CaCO}_3 \rightarrow$  \_\_\_\_  $\text{CaCl}_2$  + \_\_\_\_  $\text{H}_2\text{O}$  + \_\_\_\_  $\text{CO}_2$
- 18)    \_\_\_\_  $\text{HNO}_3$  + \_\_\_\_  $\text{NaHCO}_3 \rightarrow$  \_\_\_\_  $\text{NaNO}_3$  + \_\_\_\_  $\text{H}_2\text{O}$  + \_\_\_\_  $\text{CO}_2$
- 19)    \_\_\_\_  $\text{H}_2\text{O}$  + \_\_\_\_  $\text{O}_2 \rightarrow$  \_\_\_\_  $\text{H}_2\text{O}_2$
- 20)    \_\_\_\_  $\text{NaBr}$  + \_\_\_\_  $\text{CaF}_2 \rightarrow$  \_\_\_\_  $\text{NaF}$  + \_\_\_\_  $\text{CaBr}_2$
- 21)    \_\_\_\_  $\text{H}_2\text{SO}_4$  + \_\_\_\_  $\text{NaNO}_2 \rightarrow$  \_\_\_\_  $\text{HNO}_2$  + \_\_\_\_  $\text{Na}_2\text{SO}_4$

## Balancing Worksheet #1

Balance the following equations using whole number coefficients. Please note that these equations may be balanced as written.



26.  $\text{N}_2 + \text{H}_2 \rightarrow \text{NH}_3$
27.  $\text{N}_2 + \text{O}_2 \rightarrow \text{N}_2\text{O}$
28.  $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
29.  $\text{SiCl}_4 + \text{H}_2\text{O} \rightarrow \text{H}_4\text{SiO}_4 + \text{HCl}$
30.  $\text{H}_3\text{PO}_4 \rightarrow \text{H}_4\text{P}_2\text{O}_7 + \text{H}_2\text{O}$
31.  $\text{CO}_2 + \text{NH}_3 \rightarrow \text{OC}(\text{NH}_2)_2 + \text{H}_2\text{O}$
32.  $\text{Al}(\text{OH})_3 + \text{H}_2\text{SO}_4 \rightarrow \text{Al}_2(\text{SO}_4)_3 + \text{H}_2\text{O}$
33.  $\text{Fe}_2(\text{SO}_4)_3 + \text{KOH} \rightarrow \text{K}_2\text{SO}_4 + \text{Fe}(\text{OH})_3$
34.  $\text{H}_2\text{SO}_4 + \text{HI} \rightarrow \text{H}_2\text{S} + \text{I}_2 + \text{H}_2\text{O}$
35.  $\text{Al} + \text{FeO} \rightarrow \text{Al}_2\text{O}_3 + \text{Fe}$
36.  $\text{Na}_2\text{CO}_3 + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O} + \text{CO}_2$
37.  $\text{P}_4 + \text{O}_2 \rightarrow \text{P}_2\text{O}_5$
38.  $\text{K}_2\text{O} + \text{H}_2\text{O} \rightarrow \text{KOH}$
39.  $\text{Al} + \text{O}_2 \rightarrow \text{Al}_2\text{O}_3$
40.  $\text{Na}_2\text{O}_2 + \text{H}_2\text{O} \rightarrow \text{NaOH} + \text{O}_2$
41.  $\text{C} + \text{H}_2\text{O} \rightarrow \text{CO} + \text{H}_2$
42.  $\text{H}_3\text{AsO}_4 \rightarrow \text{As}_2\text{O}_5 + \text{H}_2\text{O}$
43.  $\text{Al}_2(\text{SO}_4)_3 + \text{Ca}(\text{OH})_2 \rightarrow \text{Al}(\text{OH})_3 + \text{CaSO}_4$
44.  $\text{FeCl}_3 + \text{NH}_4\text{OH} \rightarrow \text{Fe}(\text{OH})_3 + \text{NH}_4\text{Cl}$
45.  $\text{Ca}_3(\text{PO}_4)_2 + \text{SiO}_2 \rightarrow \text{P}_4\text{O}_{10} + \text{CaSiO}_3$
46.  $\text{N}_2\text{O}_5 + \text{H}_2\text{O} \rightarrow \text{HNO}_3$
47.  $\text{Al} + \text{HCl} \rightarrow \text{AlCl}_3 + \text{H}_2$
48.  $\text{H}_3\text{BO}_3 \rightarrow \text{H}_4\text{B}_6\text{O}_{11} + \text{H}_2\text{O}$
49.  $\text{Mg} + \text{N}_2 \rightarrow \text{Mg}_3\text{N}_2$
50.  $\text{NaOH} + \text{Cl}_2 \rightarrow \text{NaCl} + \text{NaClO} + \text{H}_2\text{O}$

Balance the following equations by placing correct whole number coefficients in the blanks.

