

## Balancing Equations Worksheet

Working in your cooperative groups, practice balancing each of the following equations. Compare answers, and if someone in the group is having difficulty, other members of the group are responsible for insuring that everyone in the group masters the task. One worksheet will be collected per group and the grade shared with all members of the group. Make sure that everyone's name is on the top of the page.

1.  $\text{Ca} + \text{O}_2 \longrightarrow \text{CaO}$
2.  $\text{H}_2 + \text{Cl}_2 \longrightarrow \text{HCl}$
3.  $\text{P}_4 + \text{S}_8 \longrightarrow \text{P}_2\text{S}_5$
4.  $\text{CO} + \text{O}_2 \longrightarrow \text{CO}_2$
5.  $\text{C}_2\text{H}_6 + \text{O}_2 \longrightarrow \text{CO}_2 + \text{H}_2\text{O}$
6.  $\text{C}_2\text{H}_5\text{OH} + \text{O}_2 \longrightarrow \text{CO}_2 + \text{H}_2\text{O}$
7.  $\text{FeS}_2 + \text{O}_2 \longrightarrow \text{Fe}_2\text{O}_3 + \text{SO}_2$
8.  $\text{P}_4 + \text{O}_3 \longrightarrow \text{P}_2\text{O}_5$
9.  $\text{NH}_3 + \text{O}_2 \longrightarrow \text{N}_2\text{O}_3 + \text{H}_2\text{O}$
10.  $\text{Si}_5\text{H}_{11} + \text{Br}_2 \longrightarrow \text{Si} + \text{HBr}$
11.  $\text{FeCl}_3 + \text{NaOH} \longrightarrow \text{Fe}(\text{OH})_3 + \text{NaCl}$
12.  $\text{Fe} + \text{H}_2\text{O} \longrightarrow \text{Fe}_2\text{O}_3 + \text{H}_2$
13.  $\text{C}_{10}\text{H}_{22} + \text{Cl}_2 \longrightarrow \text{C} + \text{HCl}$
14.  $\text{FeCl}_3 + \text{Na}_2\text{SO}_4 \longrightarrow \text{Fe}_2(\text{SO}_4)_3 + \text{NaCl}$
15.  $\text{Al} + \text{HNO}_3 \longrightarrow \text{Al}(\text{NO}_3)_3 + \text{H}_2$
16.  $\text{K} + \text{H}_2\text{O} \longrightarrow \text{KOH} + \text{H}_2$
17.  $\text{C}_3\text{H}_8 + \text{S}_8 \longrightarrow \text{CS}_2 + \text{H}_2\text{S}$
18.  $\text{MgCl}_2 + \text{Al}(\text{OH})_3 \longrightarrow \text{AlCl}_3 + \text{Mg}(\text{OH})_2$
19.  $\text{ZnFeS}_2 + \text{O}_2 \longrightarrow \text{Zn} + \text{FeO} + \text{SO}_2$
20.  $\text{P}_4\text{O}_{10} + \text{H}_2\text{O} \longrightarrow \text{H}_3\text{PO}_4$
21.  $\text{KClO}_3 \longrightarrow \text{KCl} + \text{KClO}_4$
22.  $\text{Mg}_3\text{N}_2 + \text{H}_2\text{O} \longrightarrow \text{Mg}(\text{OH})_2 + \text{NH}_3$