

## Balancing Equations Using the Trial & Error Method

Watch the Video Tutorial below. Then use the trial and error method to balance the equations below. When you are finished, check your work using the Answer Key.

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| <b>Video Tutorial</b>                                                             |  | <b>Answer Key</b>                                                                  |

1.  $\text{___ N}_2 + \text{___ H}_2 \rightarrow \text{___ NH}_3$
2.  $\text{___ KCl} + \text{___ F}_2 \rightarrow \text{___ KF} + \text{___ Cl}_2$
3.  $\text{___ AlBr}_3 + \text{___ K}_2\text{SO}_4 \rightarrow \text{___ Al}_2(\text{SO}_4)_3 + \text{___ KBr}$
4.  $\text{___ CH}_4 + \text{___ O}_2 \rightarrow \text{___ CO}_2 + \text{___ H}_2\text{O}$
5.  $\text{___ P} + \text{___ O}_2 \rightarrow \text{___ P}_2\text{O}_5$
6.  $\text{___ Na} + \text{___ H}_2\text{O} \rightarrow \text{___ H}_2 + \text{___ NaOH}$
7.  $\text{___ NO} + \text{___ H}_2 \rightarrow \text{___ N}_2 + \text{___ H}_2\text{O}$
8.  $\text{___ Cu} + \text{___ H}_2\text{SO}_4 \rightarrow \text{___ CuSO}_4 + \text{___ H}_2\text{O} + \text{___ SO}_2$
9.  $\text{___ C}_8\text{H}_{18} + \text{___ O}_2 \rightarrow \text{___ H}_2\text{O} + \text{___ CO}_2$
10.  $\text{___ S}_8 + \text{___ O}_2 \rightarrow \text{___ SO}_3$
11.  $\text{___ KClO}_3 \rightarrow \text{___ KCl} + \text{___ O}_2$
12.  $\text{___ Al} + \text{___ HCl} \rightarrow \text{___ AlCl}_3 + \text{___ H}_2$