Types of Reactions
Predicting Product Practice

Things to Remember – crossing over to make neutral compounds, diatomics, roman numerals, rewriting water as H(OH), write good formulas and then balance at the end to fix your numbers!

Please note that the following reactions are NOT necessarily balanced! We are just focusing on types of reactions and predicting products. You can balance them later!
## Page Set Up

<table>
<thead>
<tr>
<th>Q#</th>
<th>Type</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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<td>3</td>
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<tr>
<td>Etc...</td>
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</tbody>
</table>
$\text{BaCl}_2 + \text{H}_2\text{O} \rightarrow$
NaBr →
Li + H₂O →
\[(\text{NH}_4 \text{)(NO}_3 \text{)} + \text{Ba(OH)}_2 \rightarrow \]
CaCO$_3$ + HCl →
K + HCl →
CaOH $\rightarrow$ calcium oxide + water
Na₂S + H₂O →
C₆H₈ + O₂ →
$K + N_2 \rightarrow$
$\text{Cu} + \text{AlCl}_3 \rightarrow$

*assume copper (II) in your product*
$\text{CuSO}_4 + \text{NaOH} \rightarrow$

*assume copper (I) is in your product*
Ca + Br₂ →
K + H$_2$O $\rightarrow$
Fe + Cl₂ →

*assume iron (IV) is in your product*
CaBr$_2$ + H$_2$O →
\[ \text{MgCO}_3 + \text{HCl} \rightarrow \]
\[ \text{C}_2\text{H}_4 + \text{O}_2 \rightarrow \text{CO}_2 + \text{H}_2\text{O} \]
Ca + CuCl₃ →
\[ \text{Ca(OH)}_2 + \text{AlCl}_3 \rightarrow \]
$\text{ZnSO}_4 + \text{Ca(OH)}_2 \rightarrow$
$Zn + AlN \rightarrow$
Zn + CuCl₂ →
C_6H_{10} + O_2 →
NaF + H₂O →
$\text{Na}_2\text{O}_2 \rightarrow \text{sodium oxide} + \text{oxygen}$
C\textsubscript{4}H\textsubscript{8} + O\textsubscript{2} \rightarrow
Cl\textsubscript{2} + NiI\textsubscript{2} \rightarrow

*assume nickle(I) is in your product*
CuO
CaCO$_3$ → calcium oxide + carbon dioxide
AgNO₃ + NaCl →
Mg + O₂ →
C\textsubscript{2}H\textsubscript{2} + O\textsubscript{2} →
Ca + Cl₂ →
$\text{Br}_2 + \text{KF} \rightarrow$