


Predicting Products

Read This!

Chemists use their knowledge of combination, decomposition, single replacement, and double replacement to predict what will happen in chemical reactions. When predicting the products for a reaction it is important to remember that atoms or ions will only combine in ways that make them stable, otherwise the reaction will not happen under normal conditions. This means that it is important to pay attention to ion charges, the natural state of elements, and the formulas of common molecular substances like carbon dioxide and water. It is only *after* predicting the products and writing the correct formulas that a chemist would then apply the law of conservation of mass and balance the chemical equation using coefficients as needed.

 18. Use your understanding of common chemical reactions to predict the products for the following reactions. Writing a word equation may be helpful. Balance the chemical equations *after* you have written the correct chemical formulas for all of the reactants and products.

