

Classification of Chemical Reactions Internet Lab Activity

Scientists continually seek to understand the changes that take place in and around us each day. The task can only be accomplished by first trying to identify the pure substances that enter into and are produced by chemical reactions. Because of the vast number of changes, it then becomes necessary to classify the reactions into general categories. In this way, scientists are better able to predict the outcome of the given reaction by recognizing it as belonging to a particular type.

There are several ways of classifying chemical reactions. The simplest scheme of classification involves creating five different categories. Although not every single reaction can be placed in these categories, many can. For this reason, classification is a useful tool in organizing chemical changes that take place.

In this lab activity you will observe examples of each of the 5 classifications of reactions. Some will be viewed as demonstrations or video disk clips. Other reactions will be done by you. Go to the internet site with the following URL:

http://www.chem.vt.edu/RVGS/notes/Types_of_Equations.html

At that site, you will complete practice exercises for each type of reaction. You will then complete several additional internet practice sites which will reinforce your knowledge of classifications of reactions.

INTERNET

1. Type the URL: http://www.chem.vt.edu/RVGS/notes/Types_of_Equations.html into Netscape.
2. Scroll down to: II. Four basic types of chemical reactions.
3. Scroll to C. Replacement, and read through the information.
4. Complete the "Practice Predicting Products of Replacement Reactions" link.
5. Complete the remaining "practice" links for the other types of reactions.

For additional practice:

Open *Word* and set up a split screen with *Netscape* on one half and *Word* on the other. Complete the practice problems on the first two sites below by typing the answers on the *Word* document. Compare your answers with the given answers.

<http://www.howe.k12.ok.us/~jimaskew/creact.htm> (complete homework assignment 102 and practice problems.)

<http://dbhs.wvusd.k12.ca.us/Equations/Equations.html> (do worksheet #1)

<http://tqd.advanced.org/2923/react.html> (information)

<http://members.tripod.com/~EppE/reaction.htm> (information)

<http://library.advanced.org/10429/high/balequa/balequa.htm> (Think Quest information)

<http://members.aol.com/profchm/rules.html> (solubility rules)

<http://crystal.biol.csufresno.edu:8080/~davidz/Chem3AF97/ChZ/SolubilityRules.html> (solubility rules chart)

<http://wind.cc.whecn.edu/~csimone/chem1025/handouts/soluble.html> (solubility rules)