



High School Science Virtual Learning

College Chemistry

Types of Chemical Reactions

Virtual Lab

May 18, 2020



High School College Chemistry

Lesson: May 18, 2020

Objective/Learning Target:

Students will work on a virtual lab to reinforce their understanding of chemical reactions.



Let's Get Started:

1. What are some common indicators of a chemical reaction?
2. What are 5 main types of chemical reactions?



Let's Get Started: **Answer Key**

1. What are some common indicators of a chemical reaction? **Formation of a gas, aroma, NOT reversible, Temperature change, new substance**
2. What are 5 main types of chemical reactions? **Combination, decomposition, single displacement, double displacement, combustion**



Lesson Activity:

Directions:

1. Watch this lab [video](#).
2. Fill out this [handout](#) using the lab [data](#).



Practice

Complete the following questions using the information you learned during the lesson activity.

Questions:

1. Is baking a cake a physical or chemical change? How do you know?
2. When iron is exposed to oxygen, it rusts. What type of chemical reaction is this?
3. Write the balanced equation for a reaction between calcium and iron (III) chloride.

Once you have completed the practice questions check with the **answer** key.

1. Chemical change. Signs include gases forming (rising), color change, odor, temperature change, and formation of a new substance (cake is an entirely different substance from batter).
2. Combination. It technically can also be considered combustion.
3. $3\text{Ca} + 2\text{FeCl}_3 \rightarrow 3\text{CaCl}_2 + 2\text{Fe}$

Additional Practice:

Click on this [link](#) to see some more examples of chemical reactions. Do not try these at home. (In addition, some of the caesium and water reactions might have other things added to exaggerate the explosiveness of the reaction)