

High School Science Virtual Learning

College Chemistry Types of Chemical Reactions Virtual Lab

May 19, 2020



High School College Chemistry Lesson: May 19, 2020

Objective/Learning Target:

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



Let's Get Started:

- 1. Which of the following are chemical reactions?
 - a. Paper burning
 - b. Ice melting
 - c. Sugar dissolving
 - d. Food being digested
- 2. What is the key difference between chemical and physical changes?



Let's Get Started: Answer Key

- 1. Which of the following are chemical reactions?
 - a. Paper burning (Chemical)
 - b. Ice melting (Physical)
 - c. Sugar dissolving (Physical)
 - d. Food being digested (Chemical)
- 2. What is the key difference between chemical and physical changes? Chemical changes form a new substance, but the substance does not change for a physical change.



Lesson Activity:

Directions:

- 1. Check your answers against this answer key.
- 2. For an explanation of the types of chemical reactions, watch here.



Practice

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



Questions:

- What type of reaction is shown by the equation below?
 NaCl + AgNO₃ → NaNO₃ + AgCl
- 2. Predict the products of the following reaction. AlCl₃ + Ca →
- 3. Balance the following equation. $CuBr_2 + Al \rightarrow AlBr_3 + Cu$



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

- What type of reaction is shown by the equation below?
 NaCl + AgNO₃ → NaNO₃ + AgCl (Double Displacement)
- 2. Predict the products of the following reaction. $AlCl_3 + Ca \rightarrow CaCl_2 + Al$
- 3. Balance the following equation. $3\text{CuBr}_2 + 2\text{Al} \rightarrow 2\text{AlBr}_3 + 3\text{Cu}$



Additional Practice:

Click on this <u>link</u> to see some more examples of chemical reactions. Do not try these at home.

There is a worksheet and answer key in the description of the video if you would like more practice.