Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

High School Science Virtual Learning

College Chemistry
Properties of Materials, Continued

May 5, 2020

High School College Chemistry
Lesson: May 5, 2020

Objective/Learning Target:

Students will complete the virtual lab over metal reactivity.

Let's Get Started:

1. What would happen if you put aluminum in $CuCl_2$ solution?

2. What would happen if you put copper in $AlCl_3$ solution?

Let's Get Started: Answer Key

1. What would happen if you put aluminum in $CuCl_2$ solution? The copper would be displaced, ending up as a pure metal. The aluminum would form aluminum chloride, which would dissolve into the water.

2. What would happen if you put copper in $AlCl_3$ solution? No reaction, because aluminum is more reactive than copper, so it will stay in solution.

Lesson Activity:

Directions:

1. Check your lab worksheet against this answer key.
2. Watch this reaction series video, and this explanation of how it relates to single displacement reactions.

Practice

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

Questions:

For each of the following, state which element is replaced or if there will be no reaction.

1. Gold + Iron (II) Chloride
2. Tin + Hydrochloric Acid
3. Aluminum + Magnesium Sulfate
4. Carbon + $AgNO_3$
5. Lead + Gold (III) Chloride

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

1. No reaction
2. Hydrogen
3. No reaction
4. Silver
5. Gold

Additional Practice:
This worksheet has the reactivity series included, and the answer key is at the very bottom.