Inspiring Greatness

ISD

INDEPENDENCE SCHOOL DISTRICT

## High School Science Virtual Learning

# College Chemistry
# Acid-Base Virtual Lab

April 28, 2020

High School College Chemistry
Lesson: April 28, 2020

**Objective/Learning Target:**

Students will be able to explain acid-base equilibrium and how it affects pH.

# Let's Get Started:

1. What is the difference between a strong acid and a weak acid?

2. Where are acids on the pH scale?

# Let's Get Started: Answer Key

1. What is the difference between a strong acid and a weak acid? Strong acids dissociate (break apart, ionize) more than weak acids do.

2. Where are acids on the pH scale? Acids have low pH values. 7 is neutral, and anything lower is an acid.

# Lesson Activity:

**Directions:**

1. Use this answer key to check your work from yesterday.
2. This video is from crash course and explains acids and bases.

# Practice

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

Questions: $Na_2CO_3 + H_2C_2O_4 \rightleftarrows Na_2C_2O_4 + H_2CO_3$

1. Identify the acid and base in the reaction above.
2. Identify the conjugate acid and conjugate base in the reaction above.
3. What is the most common acid in the world?

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

1. Identify the acid and base in the reaction above.
   Acid: $H_2C_2O_4$ Base: $Na_2CO_3$
2. Identify the conjugate acid and conjugate base in the reaction above. Conjugate Base: $Na_2C_2O_4$ Conjugate Acid: $H_2CO_3$
3. What is the most common acid in the world? Water, which is also the most common base.

Additional Resources:
Click this link to view another video explaining the differences between acids and bases.