



High School Science Virtual Learning

College Chemistry
Titrations Virtual Lab

May 11, 2020



High School College Chemistry

Lesson: May 11, 2020

Objective/Learning Target:

Students will reinforce their knowledge of titrations through a virtual lab.



Let's Get Started:

1. What makes a compound an acid?
2. What happens in an acid-base reaction?



Let's Get Started: Answer Key

1. What makes a compound an acid? It is able to donate a H^+ ion (also called a proton). Typically, their formulas start with H
2. What happens in an acid-base reaction? The acid donates a H^+ ion to the base. For this reason, bases are often defined as hydrogen acceptors.

Lesson Activity:

Directions:

1. Watch this [lab demonstration](#) and fill out this [lab worksheet](#).
2. This [student data sheet](#) gives you the data to complete your lab worksheet.



Practice

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

Questions:

1. If you have a more concentrated acid, it will take _____ base to titrate it.
2. What might be some important applications of acid base titrations?
3. If your acid had two hydrogen atoms (such as H_2SO_4) instead of one, how would affect the amount of base needed?

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

1. More concentrated acids will need more base.
2. Pollution affects the acidity of the ocean and other bodies of water, so titrations are important for that. They also are important in the food industry for determining the pH of acidic foods like vinegar.
3. It would require twice as much base, because they need to accept twice the number of H^+ ions.



Additional Practice:
Click on the link below for an additional resource.

[Titration Video](#)