

High School Science Virtual Learning

College Chemistry Titrations Virtual Lab May 12, 2020



High School College Chemistry Lesson: May 12, 2020

Objective/Learning Target:

Students will check their work from the previous lesson, and watch a video to expand their knowledge of titrations.



Let's Get Started:

1. What is the purpose of a titration?

2. Which type of solutions are commonly used in titrations?



Let's Get Started: Answer Key

- 1. What is the purpose of a titration? Titrations are used to determine the concentration of an unknown solution.
- 2. Which type of solutions are commonly used in titrations? Acids and bases



Lesson Activity:

Directions:

- 1. Check your answers to your worksheet from the previous lesson with this <u>answer key</u>.
- 2. Watch this Teacher's Pet video about titrations.



Practice

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



Questions:

- 1. What are some solutions that might need to be titrated for something other than acids or bases?
- 2. Why is it important to add the indicator to the titration?
- 3. In a titration, 16.08 mL of NaOH react with 0.0052 moles of KHP. What is the molarity of the base?



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

- 1. Any drink that contains salt could be titrated, such as energy drinks.
- 2. The indicator tells you when the reaction is complete. Without it, you would titrate endlessly.
- 3. M= mol/L = 0.0052 mol/0.01608 L = 0.32 M (The moles of KHP is equal to moles of NaOH)



Additional Practice:

Click on the link below to see a titration that is not used for acids or bases. This titration can be used as part of the process to determine the concentration of bleach.

Thiosulfate Titration Video