

Heroes

Sophomore chemistry students

Topic

Acids & Bases

Upon Return (outcomes)

1. Define and model weak and strong acid and base.
2. Complete, balance and model acid-base neutralization reactions.
3. Prepare and perform acid-base titration.
4. Determine concentration of acids and bases from titration.
5. Leverage titration to determine total acidity of wine sample.

Journey

Phase	Description	Technology
1. Call to Adventure (Engage)	Play clip from <i>Fight Club</i> . Desired questions from students: What is the “white stuff”? Is that an acid or base burn? Why does the stuff in the bottle not burn him?	http://www.vibby.com
2. Threshold Challenge (Explore)	Using the materials provided, explain what occurred in the clip from <i>Fight Club</i> . Materials: 0.1M NaOH. Household Vinegar. pH Strips. Assorted Glassware.	http://www.drive.google.com
3. Meeting the Mentor (Explain)	Screencast defining and providing examples of: Strong and weak acids and bases. Acid-base titration. Titration equation.	http://www.quicktime.com http://www.drive.google.com
4. Transformation of Hero (Extend)	Use titration to determine the concentration of an acid and a base. Use titration to determine the total acidity of an acid.	http://www.blogger.com
5. Return Home (Evaluate)	Individual quiz and blog post. Group titration lab practical.	http://www.blogger.com http://www.drive.google.com http://www.youtube.com