Acids and Bases Introduction

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| ***Teacher:*** | Ms. Athwal  | ***Date:*** | March 3 – March 7 | ***Course:*** | Chemistry | ***Grade:*** | 11 |
| ***CA Standard(s):*** 5a *Students know* the observable properties of acids, bases, and salt solutions.5b *Students know* acids are hydrogen-ion donating and bases are hydrogen-ion accepting substances.5c *Students know* strong acids and bases fully dissociate and weak acids and bases partially dissociate.5d *Students know* how to use the pH scale to characterize acid and base solutions.5e *Students know* the Arrhenius, Bronsted-Lowry, ~~and Lewis~~ acid-base definitions.5f *Students know* how to calculate pH from hydrogen-ion concentration. 5g *Students know* buffers stabilize pH in acid-base reactions. |
| ***Learning Objective (s):*** 6.1 – I can describe the common properties of acids, bases, and salts. I can distinguish them based on taste, texture, ability to conduct electricity, and other observable properties.6.2 – I can describe what an acid and base are using the idea of hydrogen ion donation and hydrogen ion accepting.6.3 – I can characterize a compound as either a strong acid/base or weak acid/base based on how much it dissociates.6.4 – I can identify a compound as an acid or base using the pH of a solution.6.5 – I can calculate the pH and pOH of a solution and explain whether this compound is acidic or basic.6.6 – I can calculate the concentration of an unknown acidic solution using a titration.6.7 – I can discuss the differences between Arrhenius and Bronsted-Lowry acids/bases. |
| ***Essential Question(s):*** How do you dispose of a dead body? |
| **Assessment**: * Exit Ticket
* Arrhenius acid and Arrhenius base quiz
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| ***Do Now***:1. What is the chemical formula of the substance used to dissolve all the fatty tissue of the body?
2. What is the chemical formula of the other substance that also removes all traces of blood and DNA?
3. Titrations are used to calculate:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?
4. 2. During a titration, the equivalence point indicates that:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_?
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| **WHOLE GROUP/ DIRECT INTRUCTION** |
| * Arrhenius and Bronsted – Lowry acid/bases
* Titrations
* Logarithms
* pH
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| **SMALL GROUP STATION** |  | **COLLABORATIVE STATION** |  | **COMPUTER ASSISTED STATION** |
| Review practice logs and pH |  | Stations Review Packet  |  | Blogging Review  |