

Chem Lab Resources

This event really focuses on chemistry, so if that's an interest for you, you should look into this event. Students will learn about the year's selected chemistry topic, and perform a lab regarding those topics. The topic for the 2020 year is Aqueous Solutions, Acids, and Bases. It may help if you are in IB Chemistry or if you have taken it.

Helpful links: <https://www.soinc.org/chem-lab-c>,
https://scioly.org/wiki/index.php/Chemistry_Lab.

General Chem Lab Resources

Probeware Setup

Chem I topics (Refer to Chemistry I workbook):

- [Nomenclature](#)
- [Formula writing](#)
- [Stoichiometry](#) (mole conversions and percentage yield)
- [Polyatomic ions](#) (nitrate, carbonate, phosphate, acetate, sulfate, ammonium, bicarbonate, hydroxide)
- -ite versus -ate (one more oxygen than -ite) form of anions
- Know charges from periodic table

Acid/Base Chem concepts:

- Properties and uses:
 - [Acid formulas](#)
 - [Base formulas](#)
 - Refer to general rulebook to know exactly which acids and bases need to be known
 - [Acid/Base indicators](#) and how they are used
- Reactions limited to metals, carbonates, bicarbonates, sulfites, bisulfites, oxides, and neutralizations
- [Titrations](#) to determine the percent composition, molarity, and/or molecular mass

Aqueous Solutions:

- Principles, properties, terms, and definitions concerning aqueous solutions
- [Calculate solution concentration](#) given quantities of solute and solvent
- [Calculate the amount of material needed to achieve a specific concentration](#)
- Different measurements of concentration ([molarity](#), [molality](#), [mass percentage](#), [ppm](#)) and how to calculate each

[Practice Tests](#): Scroll down to your event

[More Practice Tests!](#)

[Flashcards](#)

<https://moodle.manistee.org/course/view.php?id=1011>