

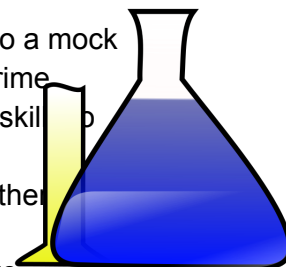


# Chemistry

## 5th Grade and up.

We will be covering many middle school and high school Chemistry standards while doing a hands-on chemistry lab every week. (6 hours of Chemistry Lab completed within course)

- Electrolyte analysis- Using electrolyte sensor lab to discover whether or not sports drinks really do provide more electrolytes than other beverages.
- Filtration methods for clean water- discover the how and why of water treatment and filtration.
- Homemade Ph Scale- Learn how to use kitchen items to create your own science lab and determine the Ph of different substances.
- Simulated health testing labs- perform real tests on simulated urine samples, examining factors such as pH, color & clarity. They'll also test for the presence or absence of proteins, glucose & calcium
- Explosions- This won't be your simple at home chemistry experiments. We will be exploring the properties of hydrogen gas and its effect on candle flames. (Cover your ears for this one!)
- Iodine and salt testing- What is iodine and why is it added to some salts and not others? How could I tell if it has been added to other foods?
- Forensic Chemistry- We will be using the chemistry skills we have learned to do a mock trial of a crime lab. Along with evidence such as fingerprints, hair, and fibers, crime scenes may display traces of unknown chemicals or powders. We will use our skills to come up with the most likely culprit at the crime scene.
- Ice Cream lab- Use our new chemistry skills in a fun way to end our class together



Lab Materials included for each student along with safety glasses and proper protective equipment.

Price- \$550

Week	Topic	Friday 9am-11am
Week 1	Intro into Chemistry and Homemade Ph scale and simulated health testing lab	April 12th
Week 2	Elements of life and nutrition. Electrolyte analysis and Iodine/Salt Lab	April 26th
Week 3	The Importance of H <sub>2</sub> O. Filtration Lab	April 19th
Week 4	Explosions. Is it really Chemistry without them?!	May 3rd
Week 5	Forensic Chemistry, Help solve a Crime. Make your own Ice Cream!	May 10th
<b>Optional - Field trip to TBD</b>		

