

Class Title: Orange MS Intro to Chemistry Lab

Teacher Name: Rebecca Healy

Class Day: Friday

Class Size: 10

Class Cost: \$50

Class Fee: \$96

Ages or color group served: Orange

What level is this class: Level 3

Prerequisites: Orange level requirements.

Graduation Requirements: NA

Homework Requirements: Homework will be assigned according to each module.

Class Description:

Studying chemistry is exciting and interesting from the tiniest particles to chemical reactions that happen right before your eyes!

Explore the amazing world of chemistry with your peers in a setting that will help you connect the pieces. This class will take you on a journey through chemistry – the study of matter – where you'll learn about acids and bases, physical reactions, polymerization, and more! You'll be able to learn important chemistry topics through hands-on experiments, making concepts exciting and memorable.

The primary topics covered will include:

- States of Matter
 - Solubility
- Acids and Bases
 - Polymers
- Chemical Reactions

Your student will experience chemistry topics including:

- How to make a polymer bouncy ball
- Determining the density of different substances
 - Electroplating a metal object

As your student(s) move through this class, each student will have opportunities to develop each of the following science skills:

- Develop testable questions about nature

- Create, evaluate, and use models
- Design and conduct investigations
 - Organize and reflect on data
- Use computational thinking to show patterns and relationships
 - Use evidence to explain and argue
 - Synthesize ideas and communicate to others

Please be advised, this is middle school level only, no high school credit will be awarded. We encourage high schoolers to participate in this class as an entry-level chemistry to prepare them for high school level.

Week 1:

Introductions / Expectations

Safety rules and explanations

Wearing safety equipment

Review of atoms and molecules

Week 2:

Topic: States of Matter

Week 3:

Topic: Solubility and Solvents

Week 4:

Topic: Physical Properties

Week 5:

Topic: Acids and Bases

Week 6:

Topic: Acids and Bases pt2

Week 7:

Topic: Polymerization

Week 8:

Topic: Precipitation

Week 9:

Topic: Physical Changes

Week 10:

Topic: Physical Changes pt 2

Week 11:

Topic: Chemical reactions

Week 12:

Class review with games

End of semester party