



EXPERIMENTS WITH ELEMENTS

Tuesdays, September 10-December 17 (no class Oct 15, Nov 5, Nov 26; 12 weeks)

11:00 am-12:15 pm

Ages 6-10

Students learn about the periodic table and how it is organized, practice using lab tools to measure volume and mass, and conduct simple chemistry experiments to learn about specific elements and their properties. (Yes, even little kids can learn about the periodic table!) Each week we explore a new element and/or lab technique through hands-on activities. All lab costs are included in registration fee.

Instructor: Jessica Barnes, BSc

Location: Science Center (suite 5) - Roswell

Course fee: \$200 OR \$20/lab

10% off sibling discount

Register for full semester or individual labs.

LAB SCHEDULE:

The Metric System – Tuesday, September 10

In our introduction to chemistry, we learn how to use science tools to measure mass, volume and distance using the metric system.

Density Gradients – Tuesday, September 17

Students use scientific tools to measure the volume of liquids as they create density gradients and predict where different objects will float or sink in it.

The Periodic Table – Tuesday, September 24

We investigate the elements and learn what the symbols on the periodic table mean, figure out why we call water "H₂O," and conduct a simple experiment with tin.

Balloon Experiment – Tuesday, October 1

Students are challenged to design and conduct an experiment to test the best way to lift a heavy object off the ground, while learning why helium floats.

Acids and Bases – Tuesday, October 8

This week, students create color-changing experiments as they learn about acids and bases, and test the pH of different household liquids

Salt Crystals – Tuesday, October 22

We study crystallization this week through investigating the shapes of different types of salt crystals, and conducting two experiments with different compounds.

The Diaper Experiment – Tuesday, October 29

This week, we learn how chemistry is used in our everyday lives as we conduct a polymer experiment with diapers.

Chemical Reactions – Tuesday, November 12

We conduct experiments in a bag to observe how some chemical reactions get warm while others get cold, and try to figure out why.

Iodine Clock – Tuesday, November 19

In this lab, we practice using our science tools as we conduct a color-changing reaction using starch and iodine, and get some unexpected results.

Magnetic Elements – Tuesday, December 3

Students study the three magnetic elements of the periodic table, and experiment with ceramic and neodymium magnets.

Reaction Rates – Tuesday, December 10

Today, we design and conduct an experiment to learn how temperature affects the rate of a reaction in a chemical reaction and explore the element carbon.

Non-Newtonian Fluids – Tuesday, December 17

Today, we learn how some substances act like both a solid and a liquid, as we create and play with two non-Newtonian fluids.