

## **ELEMENTARY ELEMENTS**

Wednesdays, January 26-May 4 (no class Feb 16, Mar 16, or Apr 6; 12 weeks)

12:30pm-1:45pm

Ages 6-8

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: Tina Oresteen, BSc

Location: Discover Science Center Peachtree City

Course fee: \$220 OR \$20/lab

10% off sibling discount

Register for full semester or individual labs.

## **LAB SCHEDULE:**

**The Metric System** – Wednesday, January 26

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

**Density Gradients** – Wednesday, February 2

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** – Wednesday, February 9

We investigate the elements and learn what the symbols on the periodic table mean, figure out why we call water "H<sub>2</sub>O," and conduct a simple experiment with tin.

**Balloon Experiment** – Wednesday, February 23

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** – Wednesday, March 2

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

**Salt Crystals** – Wednesday, March 9

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** – Wednesday, March 23

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

**Chemical Reactions** – Wednesday, March 30

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** – Wednesday, April 13

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** – Wednesday, April 20

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

**Reaction Rates** – Wednesday, April 26

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** – Wednesday, May 4

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