

GEOLOGY

Wednesdays, January 27-April 28 (no class Feb 17 or Apr 7: 12 weeks)

12:30-1:45pm

Ages 8-10

Students become geologists and paleontologists as we study the structure of Earth and its forces, investigate the physical and chemical properties of rocks and minerals and examine geologic history through the fossil record. All lab costs are included in registration fee. Course enrollment is limited to 12 students.

Instructor: Corinne Zellie, BSc

Location: Science Center (suite 5)

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

10% sibling discount

LAB SCHEDULE:

Layers of the Earth - Wednesday, January 27

Students learn about the rock layers of Earth's crust, their composition, characteristics and processes affecting them as they create a model of our planet.

Erosion and Weathering - Wednesday, February 3

We see how Earth's forces have sculpted our landscape by experimenting with the processes of erosion, deposition and weathering.

Minerals - Wednesday, February 10

This week, we learn the difference between rocks and minerals, study and test the physical properties of minerals, and determine how they are classified.

Crystallization - Wednesday, February 24

Students investigate the chemistry of mineral crystallization, crack open geodes to find crystallized minerals and conduct a crystallization experiment.

Sedimentary Rocks - Wednesday, March 3

Today, we study sedimentary rocks and their characteristics, and model how they are formed in nature.

Igneous Rocks - Wednesday, March 10

We explore our igneous rock collection, and learn how they were formed by the cooling of magma from volcanic activity.

Metamorphic Rocks - Wednesday, March 17

In this lab, we investigate how existing rocks metamorphose into a new rock type through heat and pressure.

The Rock Cycle - Wednesday, March 24

We simulate the rock cycle with a heat and pressure experiment to demonstrate how each rock type could transform into a different type of rock.

Rock Collection Identification - Wednesday, March 31

Today, kids show off their own rock collections and use their knowledge of rocks and minerals to try to identify each sample (or they can use samples from our collection).

Fossils - Wednesday, April 14

We investigate the process of fossilization and why some creatures fossilize better than others, as well as identify organisms in our fossil collection.

Paleontology - Wednesday, April 21

Today, we learn the tools and procedures paleontologists use to carefully dig fossils, and create our own fossil dig site that can be excavated later.

Paleontology Dig - Wednesday, April 28

Students conduct a fossil dig by following a mapping and excavation protocol to determine what fossils are buried at their dig site.