



Class Title: Green Rock Detectives: Rocks, Mineral and Gems

Teacher Name: Megan VanderHeide

Class Day: Friday

Class Size: 14

Class Cost: \$80

Class Fee: \$96

Ages or color group served: Green

What level is this class: Level 1

Prerequisites: NA

Graduation Requirements: Complete a rock collection

Homework Requirements: Student will work on their rock collection at home

Class Description:

In this hands-on science class, students will explore the fascinating world of rocks, minerals, crystals, gems, geodes, and fossils. Young scientists will learn how rocks are formed, how they change over time, and how to identify different types using simple observation skills.

Throughout the semester, students will:

- Learn about the three main rock types: igneous, sedimentary, and metamorphic
 - Explore the rock cycle in an age-appropriate way
 - Discover what minerals are and how they make up rocks
- Examine crystals and gems and learn what makes them special
 - Crack open geodes and investigate what's inside
- Create fossils and learn how rocks can preserve clues from long ago
- Practice using real "geologist tools" like magnifying glasses and simple hardness tests

Each week includes engaging experiments, sorting activities, creative projects, and observation time. Students will build their own personal rock collection throughout the semester.

The class concludes with a Rock Collection Showcase, where students will present their favorite specimens and demonstrate what they've learned.

This class is dedicated to my grandmother, who throughout my life collected rocks on every trip and shared her love of discovering the natural world with me and my daughter. It is my hope that this class inspires the same curiosity and joy of collecting and exploring in each student.

This course encourages curiosity, vocabulary development, observation skills, and a lasting appreciation for the beauty of the Earth — all in a fun and hands-on environment.

Week 1:

What are rocks?

Week 2:

Igneous Rocks

Week 3:

Sedimentary Rocks

Week 4:

Metamorphic rocks

Week 5:

Rock Cycle

Week 6:

Minerals

Week 7:

Crystals

Week 8:

Gems

Week 9:

Geodes

Week 10:

Fossils

Week 11:

Rocks used in real life

Week 12:

Rock, mineral and gem showcase