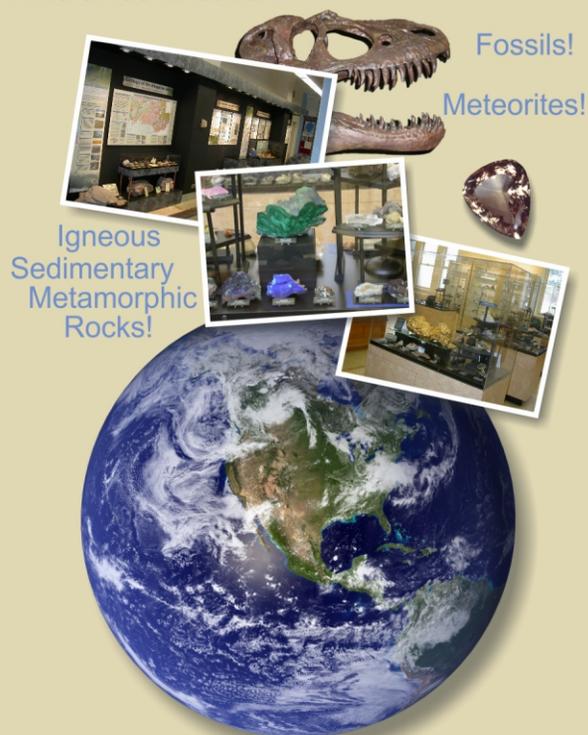


Miller Museum of Geology
Queen's University, Kingston, Ontario, Canada

School Programs 2018-2019

Elementary Level

Mineral Identification! Minerals in our lives!



The Study of the Earth
queensu.ca/geol/museum/



Miller Museum of Geology

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The Miller Museum of Geology, located in the Department of Geological Sciences at Queen's University, has been offering curriculum-linked education programs for school groups visiting the museum since 1988.

Program Duration: 40 minute instructor-led hands-on classroom program followed by 20 minutes of self-guided discovery time in the mineral and fossil galleries (1 hour total program time at the museum).

Cost: \$70/group (maximum 35/group including adults)
(Discount \$60/group for two programs booked on the same day)

Booking: Contact the Museum Curator.

Tel. 613.533.6767 **Email** MillerMuseum@queensu.ca
Check the website at queensu.ca/geol/museum/ for available dates.

Souvenir Sales: With prior approval from the teacher, students can purchase very nice mineral and fossil souvenirs for very reasonable prices while at the museum. Phone or email for details.



Department of Geological Sciences and Geological Engineering
36 Union St., Miller Hall, Queen's University,
Kingston, Ontario, K7L 3N6
Tel. (613) 533-6767 Fax. (613) 533-6592
<http://geol.queensu.ca/museum/>

For other museum-based educational programs available in Kingston, check out the website at: kingstonmuseums.ca/

Mineral Identification Program:

(Grade 4 Earth and Space Systems curriculum link)

- students share a kit of real minerals to do hands-on hardness, streak, lustre and other diagnostics on real mineral samples (maximum 3 students/kit of minerals)
- introductory interactive talk focuses on uses of mineral products in everyday life such as metals, gemstones, building materials and other uses.
- students handle gold, copper and iron ore samples as well as various crystals and mineral samples.
- coupled with the opportunity to see beautiful minerals, crystals, rocks and fossils on display in the museum galleries, this hands-on program functions well as either an introduction to the topic or a culminating wrap-up activity.

Introduction to Geology Program:

(Grade 4 Earth and Space Systems curriculum link)

- an interactive 40 minute overview of geology, the study of the Earth, illustrated with numerous touch samples.
- topics include: the origin of the Earth 4.6 billion years ago; igneous, sedimentary and metamorphic rocks and their formation; minerals and their uses in everyday life; and fossils.
- students get to pass around and discuss samples of meteorites, examples from each different group of rocks, various ores and crystals, and fossils including a real dinosaur bone from 70 million years ago!

Meteorite Program:

(Grade 6 Earth and Space Systems curriculum link)

- an interactive 40 minute program about the oldest rocks in our solar system: meteorites!
- topics include: the origin of the Earth 4.6 billion years ago as a part of the solar system; the fall to the Earth; and meteorite impact crater formation.
- students each use magnets, microscopes and other experimental equipment to search for their own potential "micrometeorites."
- couple this program with a separate hour-long visit to the Queen's Observatory to learn about their telescope and to observe the sun (weather and availability permitting, with separate fee applicable)
- bring 2 classes on the same bus to save costs and we can run concurrent programs for an entire morning or afternoon of learning!

Other Programs Available:

- the museum offers a variety of other programs to support teaching at all levels including: **Dinosaurs** (kindergarten to grade 3 level), **Changes in Life and the Earth Through Time** (grade 7&8 and grade 11 biology level), and others
- contact the museum, or visit our website for more info.
queensu.ca/geol/museum/