

In This Issue...

- Welcome Back!
- MineralsEd Virtual Workshops
- MineralsEd Fall Pro-D Events
- Mining in the News
- Field Trips
- FREE MineralsEd Resources

Connect with Us

Jason Courneyea, Director

Allegra Whistler, Program Coordinator

E: info@MineralsEd.ca

P: 604-682-5477

F: 604-682-5477

1230 - 605 Robson St.
Vancouver, BC V6B 5J3

www.MineralsEd.ca



Welcome Back to School!

Welcome back to another school year! We hope that you enjoyed a well-deserved summer vacation with time to relax and unwind, all while staying safe. At *MineralsEd*, we have been updating our teacher resource units and restocking our inventory of rocks and minerals - all for YOU and your classroom!

Throughout the 2021-2022 school year, you can count on us to support you with resources for your units on Earth Science, mineral resources, and mining! We are offering a variety of resources: virtual student and teacher workshops, outdoor in-person teacher field trips, field trip subsidies, and free online resources.

Explore this Fall edition of *MineralsEd Connections* to learn more and take advantage of our programs. Keep an eye out for our monthly e-updates!

MineralsEd Virtual Classroom Workshops

MineralsEd has developed virtual resources to better meet your needs during this school year! See our options for virtual classroom workshops below:

Virtual Junior Geologist Workshop

In this 90-minute virtual workshop, students will have the chance for safe hands-on learning as they investigate the physical properties of rocks and minerals. Guided by *MineralsEd* Partner-Teachers, students will learn about the roles of minerals in everyday life, mineral resources in B.C, the rock cycle, and mineral identification. Students will also be able to practice making observations, predictions, and experiments - all part of the scientific process! This workshop is perfect for classes learning about Earth Science, rocks and mineral resources, and mining. *Book your workshop here:* <https://bit.ly/38sbndX>

Virtual Geologist in the Classroom Guest Speaker

Connect your classroom with a real-life geologist! In this *FREE* workshop, *MineralsEd* Volunteer Geologists virtually visit classrooms to present on a geoscience topic of the educator's choice, followed by a Q&A session. This is a great opportunity for classes learning about Earth Science, rocks and minerals, or careers to get first-hand knowledge from a professional geoscientist. Our volunteers are passionate and have a diverse set of knowledge and experiences. *Book your geologist here:* <https://bit.ly/38e5ssl>

MineralsEd Fall Pro-D Day Events: Virtual Workshops & Field Trips (October 22, 2021)

MineralsEd will be offering a variety of virtual workshops and in-person outdoor field trips at the **Provincial Pro-D Day** on **Friday, October 22, 2021** (page 2-3). *Stay tuned for news regarding our in-person workshops in the future!*

At the heart of the *MineralsEd* is a suite of classroom-ready geoscience Resource Units for grades K-12, written and developed by our Partner-Teachers to support B.C. curriculum. Each Resource Unit includes a teacher's binder with background information and classroom activities, support materials (USB, poster, activity books, bookmarks, and more), and rock and mineral samples. You can browse all of the *MineralsEd* Resource Units here: <https://bit.ly/2Wvcya9>

Intermediate Integrated Resource Unit on Mining

This Resource Unit is written with a thematic approach to mining and Earth Science, designed for (but not limited to) the grade 5 curriculum and integrating learning across the curriculum subjects. The *MineralsEd's Rock Star 101* presentation will introduce participants to **mining and geology in B.C, rocks and minerals, and the rock cycle**. Teachers will have the opportunity to get hands-on by exploring their *MineralsEd Rocks and Minerals Kit* and practicing their rock identification. Afterward, participants will review lesson plans and activities, whose topics range from: the **history and future of mining, mining and the environment, uses of rocks and minerals, mining careers**, and more!

Presented by *MineralsEd* Director Jason Courneyea and Partner-Teacher Andi Eisler.

Registration (\$50): <https://bit.ly/3gNCg0p>

Secondary Mining in BC: A Resource Unit

Complex issues such as mining are better understood when examined from all angles and discussed. Written and designed for secondary grade levels for **Earth Science, Geology, Geography, and Social Studies** curriculums, this Resource Unit is intended to increase the base knowledge of educators and students about the minerals industry in B.C. Topics include **mineral exploration and mine development, extraction and processing, sustainability and reclamation, and economics**. The heart of the unit is a fictional classroom **case study** of a mine following the Environmental Assessment Act in B.C. where students will address the **environmental, cultural, and ethical** implications associated with mine development.

Presented by *MineralsEd* Partner-Teachers Bruce Kiloh, Clayton Fox, and Kimberley Pavan.

Registration (\$20): <https://bit.ly/2WCclBT>

COMING SOON: EARLY ABORIGINAL PEOPLE'S USES OF ROCKS AND MINERALS (RESOURCE UNIT)

MineralsEd is preparing to release our newest Resource Unit *Early Aboriginal People's Uses of Rocks and Minerals*, written by Partner-Teacher Dale Maingot. This resource is composed of six stations that explore different methods of how early indigenous people utilized rocks and minerals. Practice flaking your own stone tools, painting with mineral pigments, and soap carving!



Developed as an inquiry-based student challenge to accompany the B.C. curriculum, this resource is multi-disciplinary, enabling teachers to incorporate core and curricular competencies from Science, Social Studies, English Language Arts, Arts Education, and Applied Design, Skills and Technologies (ADST).

Teachers who participate in this Resource Unit will receive a binder with information and classroom activities, support materials, and a rock and mineral kit with samples of obsidian, flint, chert, malachite, and more!

Stanley Park GeoTour

Join *MineralsEd* for a walk through beautiful *Stanley Park, Vancouver* to explore the **geological history and formations** of the Stanley Park area. During this 3-hour guided tour, participants will look for and examine evidence of **rock-forming processes, surface processes, glaciation, and tectonic history** of the area in an interactive and easy-to-understand way. This in-person field trip is intended to provide teachers with geoscience context of the Vancouver area, and the resources and know-how to conduct their own in-person or virtual Stanley Park GeoTour with their classes. Teachers will be provided a resource kit and field trip guide with relevant materials.

Registration (\$10): <https://bit.ly/3zMOVKI>



Neptune Terminals Field Trip

MineralsEd is pleased to partner with *Neptune Terminals* to offer a Pro-D field trip of their 50+ year harbourfront operations on the *North Shore of Vancouver*. Over **15 million tonnes** of **potash, metallurgical coal, and phosphate rock** are handled at their facilities annually! It is a gateway for some of Canada's most important primary resources that are shipped around the world. Join us in-person to learn first-hand about the nature of their work with natural resources! This will be a valuable learning opportunity for teachers in many subject areas who seek working world connections and examples to integrate into their classroom.

Registration (\$25): <https://bit.ly/38zKkgt>



Mining in the News: The Tahltan Nation Invests in their Future

The Tahltan are an indigenous nation that has a mining history dating back thousands of years and extending to the present day. Their territory, located in northwestern B.C, makes up 11% of the province and is rich with natural resources, flora, and fauna. With such abundance comes great responsibility for the well-being of the ecosystem, cultural wellness, natural resources, and sustainable economic growth. In April 2021, the *Tahltan Central Government* signed a **\$5 million agreement with Skeena Resources** on their mineral exploration project within the Tahltan Territory (in an area known as the Golden Triangle). This partnership will allow the Tahltan to have a larger voice in the Project while being stewards of their land. However, not all mining is ok. Discovery Canada's show *Jade Fever shut down production* after seven seasons because of environmental degradation on Tahltan land due to their mining practices - highlighting the importance and need for collaboration and community engagement.

Another investment the Tahltan makes is in their youth. The program *Tene Mehodihi* (The Trail We Know) combines traditional and scientific knowledge to educate and inspire Tahltan youth while strengthening their ties to their land. Explore their adventures on their website here: <https://www.tenemehodihi.com/>

Field Trips

Looking for fun ways for your class to expand your Earth Science units? Consider taking an in-person or virtual field trip to one of the many venues throughout B.C! A full list of **Field Trip Destinations** can be found on our website. We recommend the following:

- **Britannia Mine Museum** – Learn about the mining legacy of Britannia Mine and mining and the environment. Pan for gold, explore old mining practices and current uses of minerals, take a picture with the GIANT haul truck, tour the underground tunnels, and experience the live-action show BOOM!
- **Pacific Museum of Earth** - Explore the wonders of our dynamic Earth right from the comfort of your classroom! Virtual guided and self-guided tours will take you through the history of life on Earth, Earth's treasures, and natural disasters.
- **H.R. MacMillan Space Centre** – Discover space rocks, the history of the universe, and the formation of Earth through a variety of in-person and virtual classroom programs.
- **Port of Vancouver** – Free virtual classroom workshops for grades 4-6 will teach students how their lives are connected to the Port as Canada's western gateway to over 170 trading countries!



MineralsEd Field Trip Travel Subsidies

Travel subsidies are available from MineralsEd for class field trips to geoscience or mining destinations. Request your field trip travel subsidy here: <https://bit.ly/3zmW0Ee>

FREE MineralsEd Resources

Visit the *MineralsEd* website to view all the free resources available!

- Order a **FREE MineralsEd Sample Pack** with posters, activity books, bookmarks, and more!
- Request one of our free online quizzes for your classroom: **Junior Geologist Quiz**, or **Rocks and Dirt Video & Quiz**.
- Explore mineral exploration and mining throughout the province by visiting the *MineralsEd* interactive **B.C. Mines Map** or try out our **Virtual Mining Scavenger Hunts**.
- View our **YouTube** channel for a collection of our geoscience videos.

Looking for something else? Try searching our **Virtual Library** with hundreds of resources for your Earth Science units.

We have resources for all things geoscience: Rocks and Minerals, Mining, Geology of B.C, Indigenous Knowledge in the Earth Sciences, Climate Change, Layers of the Earth, Plate Tectonics, Earthquakes, Volcanoes, Mars, Fossils, Deep Time, Careers, and more!

