

Teachers' Spring 2005 Update

Mineral Resources Education Program of British Columbia

SPRING 2005

*ROCKS,
MINERALS,
MINING &
GEOSCIENCE
IN THE
CLASSROOM*



LIBRARIANS!

Please post,
photocopy &
share with
teachers in your
school.
Thank-you.



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The Busy Buzz of Spring

With only a few short months left until school lets out for summer, teachers are busy preparing their students for the year ahead. Similarly, the MREPBC is busy preparing for a season chock-full of rocks, minerals and geoscience workshops, field trips and other educational opportunities for teachers and their classes. Take a look at all that we have planned for the coming months!

MINERAL EXPLORATION ROUNDUP 2005 WRAP UP

In cooperation with the BC and Yukon Chamber of Mines (BCYCM), the MREPBC once again involved elementary and secondary students and their teachers in *Mineral Exploration Roundup* in January. More than 100 students from Anmore Elementary and Kilmer Elementary had the opportunity to attend *Roundup 2005* as special delegates after working on mineral resources units with their teachers the preceding fall.

A highlight of the elementary students' full-day learning experience was completing a treasure hunt that challenged students to ask trade show exhibitors about their company's products and services, then write down the answers provided. Students also participated in a number of other activities as part of an MREPBC organized mini-conference including looking at special rock and mineral collections, learning how to pan for gold with Yukon Dan, listening to exploration geologists speak about their exciting work, and trying to "Stump the Geologist" with the toughest rocks from their personal collections.



The following day, a group of 19 secondary school students, each nominated by a teacher at their school, attended *Roundup 2005* and were paired with post-secondary students who acted as guides and mentors for the day. In addition to a more challenging treasure hunt, the students sat in on a technical session, tried their hand at gold panning with Yukon Dan, learned how to create custom on-line maps at the BC Ministry of Energy and Mines' MapPlace, learned about related post-secondary programs, and heard young professionals working in exploration geology talk about their careers and experiences.

Mineral Exploration Roundup is a unique opportunity for students and teachers to interact with the minerals industry which both the MREPBC and BCYCM would like to continue in future years. If you will be working on a mining or geoscience unit with your class this fall and would like to involve your class in *Mineral Exploration Roundup 2006*, please express interest on PAGE 4.

IN-HOUSE ELEMENTARY AND SECONDARY WORKSHOPS - AUGUST 24 & 25

The MREPBC will be holding half-day workshops for our *K-3 Rocks and Minerals Integrated Science Kit*, *Grade 5 Integrated Resource Unit on Mining*, *Earth Science 11/Geology 12 "Resources & Ideas"* and *Science of Mining* resource units at our downtown Vancouver office. Teachers and student teachers from across the province are invited to attend and collect new ideas and materials for the school year ahead! Resource unit descriptions can be found at www.bcminerals.ca/files/teacher_resources/000033.php. For more information or to register, see PAGE 4.

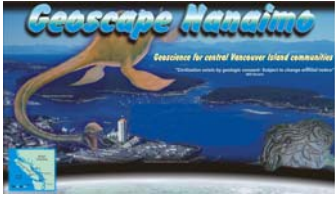


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Resources for Teachers

NEW! GEOSCAPE NANAIMO POSTER NOW AVAILABLE



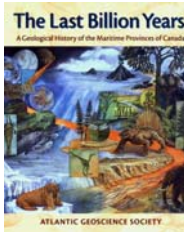
Geoscape Nanaimo is available for purchase as a wall-sized, full colour poster for \$15 or as a free on-line resource at <http://web.mala.bc.ca/geoscape>.

Geoscapes for more than 10 major cities across Canada including Vancouver and Victoria, and *Waterscapes* for Bowen Island and the Gulf Islands are available at <http://geoscape.nrcan.gc.ca/>. *Geoscape* posters can be purchased through the Geological Survey of Canada (Pacific) Maps and Publications Sales at (604) 666-0271 or gscvan@nrcan.gc.ca.

In addition to hosting the *Geoscape Nanaimo* Web site, the Malaspina University College Web site hosts a number of PowerPoint presentations by Steve Earle, the geology department Chair, covering such topics as earthquakes, volcanos, plate tectonics, and tsunamis complete with diagrams and illustrations. They can be downloaded from <http://web.mala.bc.ca/earle/teacher-resources>.

THE LAST BILLION YEARS: A GEOLOGICAL HISTORY OF THE MARITIME PROVINCES OF CANADA – ATLANTIC GEOSCIENCE SOCIETY

The Last Billion Years is a unique history book focussing on the geological history of the Maritime provinces. Illustrated in full-colour, it features paintings of ancient vistas, more than 150 photos, and explanatory sketches. An easy to use and detailed book, it is invaluable to teachers, land use planners, and the curious. Available at local book sellers and through the Atlantic Geoscience Society at <http://agc.bio.ns.ca/lby/>.



ACCESS GEOSCIENCE MAPS ON-LINE

MIRAGE (Map Image Rendering Database for Geoscience) is a digital library of Geological Survey of Canada (GSC) geological maps. Teachers and students can use this site to search and access the Earth Science Sector's extensive collection of geoscience maps via Internet. Visit MIRAGE at www.rgsc.nrcan.gc.ca/mirage/index_e.php.

GOLD PANNING IN-CLASS!

Teaching about mining or the Cariboo gold rush? Dan Moore (Yukon Dan) brings a fun, educational workshop to the classroom - great for students of all ages. Phone Dan at 604-948-4941.

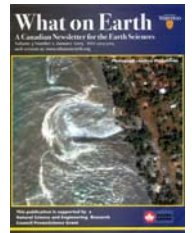


MULTIMEDIA MINING CAREERS RESOURCE ON-LINE

The Minerals Council of Australia (MCA) has assembled an excellent careers resource available for viewing on the Web at www.minerals.org.au/careers. The project takes a detailed look at 30 different jobs performed by people working in the minerals industry. Each job profile includes photographs or a video clip of the a person performing their duties, details the responsibilities of each position, and outlines the experience and training required for entry into that position.

WHAT ON EARTH. – DEPARTMENT OF EARTH SCIENCES, UNIVERSITY OF WATERLOO.

What on Earth is an Earth Science magazine for educators offering articles on a variety of topics. The Winter 2005 issue contains articles on the tsunami in Asia, talc, fossils, a geological mapping exercise developed especially for Earth Science classes and more. To view issues or buy a subscription go to www.whatonearth.org.



What's New On www.bcminerals.ca!



DIAMOND MINING ANIMATIONS POSTED

Find out how companies explore for and mine diamonds in the Canadian North with the Shockwave animations posted in the **Video Resources** section of our Web site. *Animations courtesy of Diamondex Resources Ltd.*



STARTING A MINING UNIT?

If you are starting a mining unit with your class this Spring, the **Mining in BC Information** section of www.bcminerals.ca has plenty of up-to-date information on BC's metal and coal mines.

Check out our Web site for: Upcoming Workshops and Educational Opportunities • Resource Unit Descriptions and Supplements • Mining & Geoscience Web links for Teachers & Students • *Teachers' Updates* • Real Streaming Video Resources • Teacher-Developed Coal Mining Webquest for Gr. 5 • Field Trip Guides and Summaries • *It Comes From a Mine* (Primary reader in English, French & Spanish) • Geoscience Resources and Videos Catalogue • 3-D Dimensional Rock Cycle Model Lesson • Mining Process Images and Text • Field Trip Subsidy Application & MORE!

Don't forget to order FREE bookmarks! See PAGE 4



Educational Opportunities

For more information on these and other upcoming workshops and conferences, please visit *Workshops and Field Trips* on www.bcminerals.ca or contact the MREPBC office.

GR. 5 INTEGRATED RESOURCE UNIT ON MINING - APRIL 22

The *Grade 5 Integrated Resource Unit on Mining* will be offered as a full-day session at the **Encompass 2005** conference in Port Moody. Details are available at www.bctf.ca/announcements/Encompass2005 or through Gerry Lush at 604-936-9971.

MINERALS NORTH 2005 - APRIL 27-29, STEWART, BC

Minerals North 2005 is the annual conference for the minerals industry in Northern BC and serves as a forum for communities to learn about current activities and issues related to mineral resources exploration and development. The MREPBC, with sponsorship from the BC Ministry of Energy and Mines, is offering registration fee and TOC support. Teachers interested in attending the conference should contact the MREPBC office.



CHALLENGES OF CHANGE CONFERENCE IN TERRACE BC - APRIL 29

The MREPBC's *K-3 Rocks and Minerals Integrated Science Kit*, *Grade 5 Integrated Resource Unit on Mining*, and *Science of Mining* workshops will be offered at the **Challenges of Change 2005** conference in Terrace. For details, please contact the Terrace District Teachers' Union office at (250) 635-4659. The MREPBC has also organized a *free* fly-in tour of Barrick's Eskay Creek gold mine for teachers in Northern BC on April 30, 2005. To express interest, please contact the MREPBC office.

SURREY TEACHERS' ASSOCIATION (STA) CONVENTION - MAY 6

The MREPBC will be offering the *K-3 Rocks and Minerals Integrated Science Kit*, *Grade 5 Integrated Resource Unit on Mining*, *Earth Science 11/Geology 12 "Resources & Ideas"* as full-day workshops at the **STA Convention** on May 6, 2005. For additional conference and registration details, please visit www.staconvention.ca.



BC MINING WEEK - MAY 9-15, 2005

This year the mining industry in BC is celebrating *Coal - Can't Live Without It*. PricewaterhouseCoopers will be releasing its annual report on the industry's economic impact in the province, which will be posted at www.pwc.com/mining. Find out if a mine near your community is hosting events that you and your students might like to attend!

2 FOR 1 ESCI/GEOL & MINING WORKSHOPS IN KAMLOOPS - MAY 16

The MREPBC is offering the *Earth Science 11/Geology 12 "Resources & Ideas"* and *Science of Mining* workshop on May 16, 2005 at South Kamloops Secondary. A \$50 registration fee is required for either workshop. Teachers who wish to attend both workshops will have the second \$50 workshop fee waived. To register see PAGE 4.

FIELD TRIP TO HIGHLAND VALLEY COPPER - MAY 17

The MREPBC is offering an all-day field trip for teachers to Highland Valley Copper near Logan Lake on May 17, 2005. The mine tour will be guided by mine personnel and include pit operations, processing in the mill, and reclamation. A refundable registration fee is \$25; transportation from the Lower Mainland and lunch are provided. TOC costs will be paid by the MREPBC if required. To register, see PAGE 4. **Deadline: May 2.**



UBC MINING STUDIES SUMMER INSTITUTE 2005 - JUNE 3

The UBC Department of Mining Engineering will be offering *Mining 101*, a course on the basic principles of mining and mineral processing for non-Mining Engineers, on June 3, 2005. For details visit www.mining.ubc.ca/MSIOverview.html.

UPCOMING EVENTS

KAMLOOPS EXPLORATION GROUP (KEG) CONFERENCE

April 12-13, 2005 - Best Western Towne Lodge, Kamloops, BC. For free registration and to arrange a TOC release, please contact the MREPBC office.

FIELD TRIP OPPORTUNITIES

BC MUSEUM OF MINING

Britannia Beach, BC. Contact: 1 (800) 896-4044 ext. 221. Web site: www.bcmuseumofmining.org.

WEST VANCOUVER ROCK GARDEN

Dundarave in West Vancouver. Contact: Ronald Stokes at (604) 925-2644.

TILBURY CEMENT PLANT TOUR

Lehigh Northwest Cement Ltd., 7777 Ross Road, Delta, BC. Contact Dave Warner at (604) 946-0411.

FIELD TRIP TRAVEL SUBSIDIES



\$150.00 field trip travel subsidies are available to teachers taking their classes to a mining or geoscience destination. Download the application form from www.bcminerals.ca/pdf/FTripSubsidy.pdf.

NEW GEOQWEST EXCURSIONS ESPECIALLY FOR TEACHERS!

Hedley Mining District and Mascot Mine August 30, 2005

This 1-day trip leaves out of Kelowna and offers a history, minerals and geology tour to the Hedley mining district. See PAGE 4 for details and registration.

Greenwood Eduventure Safari

August 31- September 1, 2005

This 2-day overland safari leaves out of Kelowna and travels to the historic City of Greenwood and the Phoenix open pit mine through BC's backcountry.

Exploration Safari of the Yalakom Highlands August 2-4, 2005

This 3-day overland safari leaves out of Vancouver and visits the authentic exploration, mining, cultural and natural history of this historic pioneer district.

For additional details and for bookings, contact GeoQwest Excursions Ltd. at (250) 769-0031 or email geoqwest@shaw.ca.

Event Registration

MREPBC IN-HOUSE WORKSHOPS - AUGUST 24 & 25, 2005

Elementary and secondary MREPBC resource units workshops will be offered at our downtown Vancouver office, suite 910, 1111 Melville Street. Descriptions of the resource units and their contents can be found at www.bcminerals.ca/files/teacher_resources/000033.php. To register, check the appropriate box(es) below, complete the contact information form, and return to the address provided. A non-refundable registration fee of \$50.00 per workshop must accompany this registration form. You will be faxed or emailed a confirmation with venue details. A receipt will be issued at the workshop. Participants must teach the grade level intended for the resource unit. **Registration Deadline: August 12**

Workshop Schedule:

Wednesday, August 24 8:30am - noon	Wednesday, August 24 1:00pm - 4:30pm	Thursday, August 25 8:30am - noon	Thursday, August 25 1:00pm - 4:30pm
<input type="checkbox"/> <i>Gr 5 Integrated Resource Unit on Mining</i>	<input type="checkbox"/> <i>K-3 Rocks & Minerals Integrated Science Kit</i>	<input type="checkbox"/> <i>Earth Science 11/Geology 12</i>	<input type="checkbox"/> <i>Science of Mining (secondary science)</i>

SPECIAL!
Register for both secondary workshops for only \$50

ESCI 11/GEOL 12 AND MINING WORKSHOPS IN KAMLOOPS - MAY 16, 2005

- Please register me for the *Earth Science 11/Geology 12 "Resources & Ideas"* workshop on Monday, May 16 from 8:30am until noon.
- Please register me for the *Science of Mining* workshop on Monday, May 16 from 12:30pm until 4:00.

Workshops will be held at Kamloops Secondary School, 821 Munro St, Kamloops. Please complete the contact information below and enclose the registration fee of \$50. Additional details and confirmation will sent via fax or email. **Registration deadline: May 2, 2005**

HIGHLAND VALLEY COPPER FIELD TRIP MAY 17, 2005

- I will attend the all-day tour of the Highland Valley Copper mine on May 17, 2005.
- I will require a TOC on May 17, 2005 and am sending along my principal's and superintendent's names and contact information.

Please complete the contact information below and enclose \$25 refundable registration fee. Trip will depart from Vancouver. Itinerary and confirmation will sent via fax or email. **Registration deadline: May 2, 2005**

GEOQWEST TO HEDLEY MINING DISTRICT AND MASCOT MINE - AUGUST 30, 2005

GeoQwest Excursions will be offering teachers a history, minerals and geology tour to the Hedley mining district. This all-day field trip gives an overview of the principles, issues and practices of the mining industry through visits to sites in this important mineral district and includes transportation from Kelowna, snacks and a picnic lunch. Registration fee is \$80, which includes an MREPBC subsidy. Additional details are available under **Workshops and Field Trips** at www.bcminerals.ca.

- I would like to register for the GeoQwest Excursion on August 30, 2005. \$80.00 registration fee is enclosed. Confirmation and details will be emailed or faxed. **Registration deadline: August 19, 2005**

MINERAL EXPLORATION ROUNDUP 2006

- My class will be doing a geoscience and mining unit in Fall 2005. I would like my class to present their projects at *Roundup* and attend the conference in January 2006. Please contact me this Spring with additional details.

MINING IN BC BOOKMARKS

- FREE!** Mining in BC bookmarks _____ copies

Send the completed **Contact Information** below with payment (if applicable) to:

Payment or Purchase Order number must accompany workshop registrations. Please make cheque or money order payable to MREPBC.

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Tel: 604-681-4321 ext 108/115 Fax: 604-681-5305

Summer Contact Information

Name: _____ Email: _____

School Name and Address: _____

_____ Postal Code: _____

Grade Level: _____ Subjects Taught: _____

School Phone: _____ School Fax: _____

Home Address: _____

_____ Postal Code: _____

Home Phone: _____ Home Fax: _____