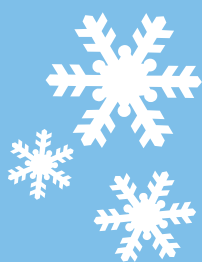


Teachers' Winter 2005 Update

Mineral Resources Education Program of British Columbia

WINTER 2005

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



LIBRARIANS!

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



MINERAL RESOURCES
EDUCATION PROGRAM OF
BRITISH COLUMBIA
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Wishing you a happy and prosperous New Year!

We hope you rang in the New Year in good spirits and had an enjoyable holiday season. Please remember to contact us for assistance with any of your mineral resources information or materials needs.

TEACHERS AND STUDENTS WELCOME AT MINERAL EXPLORATION ROUNDUP 2005



Mineral Exploration Roundup, western Canada's premier exploration conference, is being held January 24-27th, 2005 at the Westin Bayshore Resort & Marina in Vancouver. Once again, the MREPBC is collaborating with the conference host, the BC and Yukon Chamber of Mines (BCYCM), to involve teachers and students. Teachers interested in learning more about exploration and the broader minerals industry are encouraged to attend any one of four weekdays, and may apply to the MREPBC for one-day TOC

support. A schedule of technical sessions taking place each day of the conference can be viewed at www.bc-mining-house.com/rdup2005scheduleatglance.htm.

In addition, secondary teachers are asked to nominate students with an interest in geoscience, mining or engineering careers to attend the conference as special delegates of the MREPBC on Wednesday, January 26th. These students will take part in an all-day, mini-conference organized by the MREPBC that will include attending a technical session, participating in an exhibit "Treasure Hunt" activity; panning for gold; learning about the BC Ministry of Energy and Mines' **Map Place**; and watching presentations by young industry professionals on their work and career paths. Each student will be paired-up with a post-secondary student in a geoscience or mining-related program at UBC, SFU and BCIT for the day and will have the opportunity to find out more about available post-secondary programs. For information on nominations, visit www.bcminerals.ca/files/whats_new/000162.php or contact the MREPBC.



Please express your interest in either of these opportunities via the form on PAGE 4. **Registration deadline is January 10th.**

CANTATAS FOR COAL

The MREPBC is calling for teachers and students to put on their musicians' caps and create songs about coal mining in BC. Students are encouraged to investigate how coal is formed, mined and used to produce steel and generate electricity; and its importance to communities across the province. They can then use this knowledge to write a song about coal as a class activity. Classes may



write new lyrics for a favourite nursery rhyme tune or come up with an entirely new composition! The class who writes and performs the catchiest, most informational song will be rewarded with a pizza and pop lunch, and have their masterpiece "debuted" at the BC Mining Week Gala dinner in May. **Deadline**

for entries is April 15th, 2005. For additional details, visit www.bcminerals.ca/files/whats_new/000164.php. If your class would like to participate, please contact Kevin Barclay, Coordinator, MREPBC at 604-681-4321 ext. 108.

For some creative inspiration, listen to the excellent *Songs About Rocks* by BC teacher Joan Corner. You may preview the album on-line at www.songs-about-rocks.com.



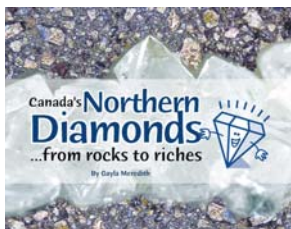
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New Resources for Teachers

CANADA'S NORTHERN DIAMONDS ...FROM ROCKS TO RICHES - GAYLA MEREDITH

Diamonds! They are the most recent mineral resource to be discovered and mined in Canada, and generate excitement and curiosity in everyone. Where are they found? How do they form? Why are they so rare? This teacher-written, information-packed and nicely-illustrated book introduces everything from geologic setting and mining in the Arctic, to cutting gems and industry careers. This is a great educational resource for teachers presenting mining units at all grade levels and would be a welcome addition to any school library. To order visit www.northerninkltd.nt.ca.



NEW MINING IN BC BOOKMARKS!

Our popular bookmarks have been *updated* to reflect mines that opened and closed in the past year. If you are teaching a geology or mining unit, your students will love having their own copy of this colourful, information-packed bookmark! Developed by the MREPBC, it has a haul truck and mineral products on the front, and a map of BC mines and mineral uses on the back. You may view the bookmark at www.bcminerals.ca/files/BookmarkWebImage.pdf. To order a *FREE* class set see PAGE 4.



RESPONDING TO CHANGE

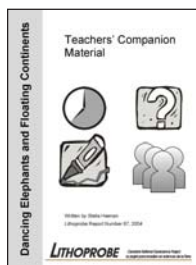


The BC Ministry of Education's draft Integrated Resource Package (IRP) for Science K-7 is now available for viewing at www.bced.gov.bc.ca/irp/drafts/welcome.htm. The MREPBC is currently reviewing the proposed changes and re-evaluating the curriculum correlations for our resource units.

SOCIALS 10/11 RESOURCE UPDATED

The Blackline Masters included with our *Social Studies 10/11: Mining in BC* resource have been updated. Teachers using the resource are invited to download the new pages from www.bcminerals.ca/files/whats_new/000163.php.

NEW LITHOPROBE TEACHERS' GUIDE RELEASED



Lithoprobe has just released a Teachers' Guide for *Dancing Elephants & Floating Continents - The story of Canada beneath your feet*. It includes 15 activities appropriate for middle school students categorized by the amount of time required, and into individual, group and class activities. It also includes Canadian curriculum correlations. Download the guide

at www.lithoprobe.ca/media/books/default.asp.

A finalist for the 2005 Hackmatack Children's Choice Book Award, John Wilson's *Dancing Elephants & Floating Continents - The story of Canada beneath your feet* is aimed at intermediate-aged readers and includes numerous photos and illustrations. It is available through local booksellers.

What's New On www.bcminerals.ca!

STREAMING VIDEO CLIPS NOW AVAILABLE!

Check out the new streaming video resource section of our Web site. Now you can watch clips of select video resources and animations on-line without waiting for them to download. Videos are playable on Windows, Macintosh and Linux platforms with RealPlayer installed. A *Rocks and Dirt Just Aren't My Thing... Or Are They?* clip and additional Sandvik Tamrock mining process animations have just been added. New clips will continue to be posted.

MINING TECHNOLOGY VIDEO NOW ON-LINE

Our recently produced video about BCIT's Mining Technology diploma program is now available on-line in our streaming video resource library. You can view it directly at www.bcminerals.ca/files/whats_new/000153.php. Secondary school teachers and counsellors may order a free copy of this resource on CD-ROM via PAGE 4.

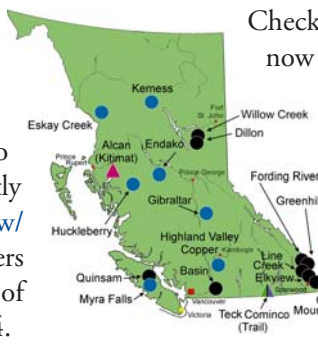


NEW GEOLOGY 12 EXPERIMENT POSTED

In David Healing's new *Mountain Building, Riftal Movements, Faulting and Folding* activity, students will create folds and faults using flour and cocoa to understand how deformed rocks in outcrops provide evidence of the size and direction of the forces that produced them. This addition to our *Earth Science 11/Geology 12 "Resources & Ideas"* resource unit can be downloaded at www.bcminerals.ca/files/whats_new/000144.php.

MINING IN BC INFORMATION NOW AVAILABLE

Check out the *Mining in BC Information* now posted on our Web site. This is an excellent source of in-depth information on BC mines. Each metal and coal operation is profiled, providing information on location, mining process, on-going reclamation, and markets. It also includes information on the workforce and nearby communities.



Educational Opportunities

FREE! KAMLOOPS EXPLORATION GROUP COMMUNITY LECTURE SERIES

January - April 2005. Days Inn, Kamloops. Designed to improve the general public's understanding of earth sciences and mineral exploration, this free lecture series covers a broad range of topics. The lectures are a great opportunity to meet with local explorationists and find answers for your questions about rocks, minerals, and fossils. A highlight of this spring's series will be a presentation by the Royal Tyrrell Museum. For information contact Ron Wells at (250) 828-2585 or Colin Russell at (250) 578-2068 or visit www.keg.bc.ca/events.html.



EARTH SCIENCE 11/GEOLOGY 12 AND SCIENCE OF MINING WORKSHOPS

The Central Okanagan Teachers' Association (COTA) will be hosting the MREPBC's Earth Science 11/Geology 12 "Resources & Ideas" and Science of Mining workshops on February 18th, 2005 in Lake County. To register, COTA members and interested secondary teachers from the Okanagan-Similkameen, Revelstoke, Kamloops/Thompson, and Nicola-Similkameen districts are asked to contact Jack Holly at (250) 860-3866 or pd23@bctf.ca.



ESCI11/GEOL12 "RESOURCES & IDEAS"

This unit is a compilation of individual and group activities that reinforce a range of topics taught in Esci11/Geol12. Offering creative ways for students to learn when they are up and out of their seats, as well as a variety of conventional lab exercises, this unit is valuable to new and experienced earth science, geology and physical geography teachers.

SCIENCE OF MINING

This resource unit consists of secondary science lab activities that mimic the mining process, and includes experiment materials and ore samples. The unit introduces rocks and minerals as non-renewable resources, environmental assessments and impacts at mine sites, the value of minerals in daily life, and the techniques involved in ore extraction, processing, and refining.

Both resource units include an instructional manual, and numerous support materials including posters, maps, booklets, videos and CD-ROMs. Complete descriptions and kit contents are available at www.bcminerals.ca/files/teacher_resources/000033.php.



BC MINING CLASS OF THE YEAR 2005 COMPETITION

Mineral Resources Across Canada has been selected as the theme for the 2005 competition, encouraging elementary school classes to develop projects exploring mineral resources in BC and beyond our province's borders. Teachers are invited to develop the project in a way that best suits their class' learning objectives, but completed projects should demonstrate the relevance and importance of mining to Canada as a whole and to many communities across the country.

A class' submission may be a single project, or one comprised of several projects completed by individuals or small groups. The projects may take any form, but must be transportable to the MREPBC office for judging. Entries will be judged on originality and creativity, content and accuracy, presentation and neatness, and comprehension of the subject.

Prizes include a \$1000 award for the school of the first place class, pizza & pop lunches, and field trip travel subsidies.



The competition is open to all elementary school classes in BC who are working on a mining unit. To enter the competition, please complete the appropriate information on PAGE 4. Entries must be received no later than February 11, 2005. Final submission of class projects must be received at the MREPBC office no later than April 15, 2005. For more details and project suggestions, download www.bcminerals.ca/pdf/MiningClassoftheYear2005.pdf or contact the MREPBC office.

HEADS UP! UPCOMING WORKSHOPS AND CONFERENCES

KAMLOOPS EXPLORATION GROUP CONFERENCE

April 11-14, 2005. Kamloops, BC. Call Marjorie or Karen at (250) 573-5700 or visit www.keg.bc.ca.

MINERALS NORTH CONFERENCE

April 27-29, 2005. Stewart, BC.

The MREPBC will be offering TOC support to teachers who wish to attend these conferences. Contact the MREPBC office for more information.

TERRACE TEACHERS' UNION CONFERENCE

April 29th, 2005. Terrace, BC. K-3 Rocks and Minerals Integrated Science and Gr. 5 Integrated Resource Unit on Mining workshops will be offered.

FIELD TRIP OPPORTUNITIES

SFU EARTH SCIENCES LAB

Simon Fraser University, Burnaby, BC. Contact: Robbie Dunlop (604) 291-4925.

BC MUSEUM OF MINING

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

PACIFIC MUSEUM OF THE EARTH

6339 Stores Road, University of BC, Vancouver, BC. Contact: (604) 822-6992. Web site: www.eos.ubc.ca/public/outreach/index.html.

BC GEM SHOW - APRIL 1-3

Central Fraser Valley Fairgrounds in Abbotsford, BC. Contact: Eric Atkinson (604) 277-3222. Web site: www.lapidary.bc.ca/gemshow.html.

FIELD TRIP TRAVEL SUBSIDIES

\$150.00 field trip travel subsidies are available through the MREPBC to teachers using an MREPBC resource unit. They are intended for classes travelling to a mining or geoscience destination. Download the application form: www.bcminerals.ca/pdf/FTripSubsidy.pdf.



Event Registration

Materials

MINERAL EXPLORATION ROUNDUP 2005

- I am a teacher who would like to attend a day of *Roundup 2005*.
- I would like to submit names of my secondary students to attend *Roundup 2005* and explore careers in the minerals industry.

Application deadline: January 10, 2005

You will be contacted by the MREPBC with additional details regarding registration, student nominees, and TOC funding.

BC MINING CLASS OF THE YEAR 2005

- I would like to enter my class in the BC Mining Class of the Year competition (entry deadline February 11, 2005)

Brief description and number of projects to be submitted:

Please provide your contact information via the section below.

HELP US TIDY UP OUR MAILING LIST

Our newsletter is also available on-line in PDF format. If you prefer to be notified via email when a new edition of *Teachers' Update* is available on our Web site instead of receiving a print copy, please check the appropriate box and provide your email address in the contact information section below.

If you prefer that print copies of our newsletter be sent to a different address, please check the appropriate box and write the updated address in the contact information section below.

- I would like to be notified of new Teachers' Updates via email
- Please send the Teachers' Update to my updated **home** address
- Please send the Teachers' Update to my updated **school** address

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

Payment or Purchase Order number must accompany materials orders. Please make cheque or money order payable to MREPBC. Prices include shipping and handling. Allow 3-4 weeks for delivery.

VIDEOS

Mining Technology - A Natural Sciences and Engineering Diploma Program at BCIT

- Video on CD-ROM¹ FREE

Digging for Answers: Students Investigate Minesite Reclamation
Secondary students find answers to their questions about the environmental impacts of mining in BC by visiting five mine sites, a mining company head office and the provincial ministry.

- Video¹ \$20.00
- Video¹ & Folio¹ \$30.00

Living on the Edge is an interactive CD-ROM that explores two features of British Columbia geology that are related to living above a subduction zone: earthquakes and volcanoes!

- Interactive CD-ROM² \$10.00

¹ appropriate for secondary. ² appropriate for elementary and secondary.

MINING IN BC BOOKMARKS

- FREE!** *MINING IN BC* bookmarks for classes studying mining or geoscience (see PAGE 2) _____ copies

SCIENCE IN A BAG! MINERALOGY

This science kit gives elementary students hands-on activities that allow them to explore the properties of minerals and develop their powers of observation, scientific testing skills, and geologic vocabulary. The kit includes 24 information and activity cards, a streak plate, teacher information and 18 minerals: talc (x2), calcite, quartz (x3), potassium feldspar, malachite, magnetite, hematite, pyrite, hornblende, sphalerite, chalcocopyrite, limonite, barite, serpentine. Available in English and French.

- Science in a Bag! Mineralogy \$25.00

Mineral Resources Education Program of BC

910 - 1111 Melville St., Vancouver, BC V6E 3V6

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

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: _____