

Teachers' Winter 2006 Update

Mineral Resources Education Program of British Columbia

WINTER 2006

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



LIBRARIANS!

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



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Through sleet and snow school still goes on!

Although the weather outside may be drab, there are still ways to make learning about rocks and minerals fun and exciting for your students. Take a look through this issue for opportunities to involve your students in upcoming industry conferences and find out about new educational resources. Before you know it, the weather will be just right for rock collecting and field trips again!

IT'S TIME TO ROUND UP FOR ROUNDUP 2006 - JANUARY 23-26

MINERAL EXPLORATION ROUNDUP 2006

Mineral Exploration Roundup, western Canada's premier exploration conference, is being held January 23-26th, 2006 at the Westin Bayshore in Vancouver. This will be the third year that the MREPBC will be collaborating with the conference host, the BC and Yukon Chamber of Mines (BCYCM), to integrate teachers and students into the conference. Teachers interested in learning more about exploration and the broader minerals industry for their own professional development are invited by the hosts to attend any one of four weekdays for *free*, and may apply to the MREPBC for one-day TOC support (see Page 4). The schedule of events and technical sessions for each day is viewable here: www.bc-mining-house.com/roundupoverview.htm.

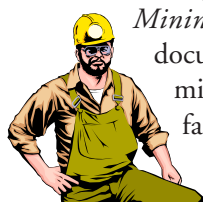
The MREPBC and the BCYCM also extend an invitation for interested secondary students to attend on Wednesday, January 26th. These students will take part in an all-day, mini-conference organized by the MREPBC that will include attending a technical session; participating in an exhibitor "Treasure Hunt"; panning for gold; an introduction to the *MapPlace* on-line; and hands-on exploration activities. 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 learn more about these post-secondary programs. Secondary students who would like to participate must be nominated by their teacher to attend. To attend Roundup for your own professional development, or to nominate a student, please see Page 4. **Registration deadline is January 13th.**



Secondary students speak with a exhibitor at Roundup 2005

CIM MINING IN SOCIETY EXHIBITION AND CAREER FAIR - VANCOUVER, MAY 14-16

In conjunction with the Canadian Institute of Mining and Metallurgy (CIM) national conference being held at the Vancouver Convention and Exhibition Centre this May, the CIM will be hosting a new exhibition and career fair called



Mining in Society (MIS). This open-to-the-public exhibition will document through its displays, all aspects of mineral resources development - exploration, mining, processing, environmental management and sustainability, transportation and fabrication - and showcase the multitude of careers in the minerals industry. *MIS* will be tailored to senior secondary students interested in learning more about training and job options. Intermediate classes that are studying mineral resources and mining are also invited to attend. Entrance for students and teachers is *free*. For more details visit the *MIS* Web site: www.mininginsociety.com. To express interest in your class' participation, phone 604-681-4321 ext. 115.



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New Resources for Teachers



MINING IN BC POSTER

The MREPBC's *Mining in BC* poster (24" x 30") shows the locations of all major metal, coal and industrial mineral mining operations in BC. A PDF version of the poster is available at www.bcminerals.ca/files/teacher_resources/000212.php.

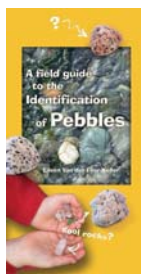
To order a *free* print copy for your classroom, see Page 4.

Supplementary teaching materials related to industrial minerals operations have been developed to complement the poster (See *New on www.bcminerals.ca* below). Used in tandem, these resources help build students' understanding of this economically important industry sector in BC.

A FIELD GUIDE TO THE IDENTIFICATION OF PEBBLES

EILEEN VAN DER FLIER-KELLER

If you, your students or someone in your family enjoys collecting pebbles and needs some help identifying them, Eileen Van der Flier-Keller, a geologist in the School of Earth and Ocean Sciences at the University of Victoria, has developed a *beautiful* guide that can be used while at the beach, in your classroom or at home! This full colour, laminated, easy to use guide has over 80 photos of pebbles from beaches and rivers that can be used to identify more than 28 different types of rocks and minerals. A great resource for Earth Science units in schools, the short text addresses how rocks form and provides fun facts about minerals in our daily lives. Available for only \$10, an order form can be downloaded from: www.bcminerals.ca/pdf/PebbleChartOrderForm11-2005.pdf.

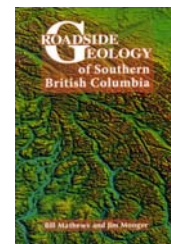


Don't forget to order FREE bookmarks too! See Page 4

ROADSIDE GEOLOGY OF SOUTHERN BRITISH COLUMBIA

BILL MATHEWS AND JIM MONGER

The title says it all - this excellent new book describes and interprets the geology readily seen along our roads in relation to the regional geology. Covering southern BC from the northern tip of Vancouver Island to the Alberta border, it includes 31 road guides, complete with relief maps; photographs and beautiful diagrams.



Available in paperback at the Geological Survey of Canada bookstore (101-605 Robson St.) and other book sellers.

MINERALS OF CANADA

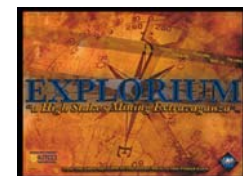
This new poster resource from the Mineralogical Association of Canada showcases representative suites of minerals from each province and territory with full colour photos of outstanding mineral specimens. Poster text is in English and French. Teachers may order a *free* copy for their classroom on Page 4.



EXPLORIUM

49TH WEST GAMES INC., VANCOUVER

The *Explorium* board game lets you try your hand at the risky and rewarding business of exploration and mining.



Players role-play as chairman and president of a junior exploration company trying to acquire untapped resources of copper, silver and gold while keeping their sights on competitors and fluctuations in metal prices to remain profitable. *Explorium* is appropriate for ages 12 to adult and is available for purchase at the Bay or on-line at: www.49west.com.

New On www.bcminerals.ca!

CANADIAN VOLCANOES POWERPOINT



Did you know that a volcanic eruption in northern BC 250 years ago killed approximately 2000 people? *Canadian Volcanoes*, a new PowerPoint presentation by Dr. Catherine Hickson, Sr. Volcanologist with the Geological Survey of Canada in Vancouver, shares this information and more. This excellent teaching resource first introduces the various types of volcanoes and eruptions, and then presents many Canadian examples, including those in BC and the Yukon. Teachers may edit the file to include information and images most helpful to their lessons. To download the PowerPoint presentation file, visit: www.bcminerals.ca/files/teacher_resources/000246.php.



INDUSTRIAL MINERAL OPERATIONS IN BC: TEACHER INFO. AND STUDENT ACTIVITIES

The MREPBC has produced a booklet of teacher information and student activity sheets focussed on BC's industrial minerals sector to accompany our *Mining in BC* poster. The booklet includes: an introduction to the diversity and importance of BC's industrial minerals, a list of industrial minerals operations and processing plants in BC, information on how BC's industrial minerals are used in everyday products, student crosswords, word searches and more! A PDF file of this resource can be downloaded from: www.bcminerals.ca/pdf/IMresourcepackage.pdf. To request an answer key, please email kbarclay@mining.bc.ca.



Concrete = lime (limestone) + silica (quartz sandstone) + aluminum (shale) + aggregate (sand and gravel or crushed rock) + water

Field Trips and Conferences



To register for events and conferences, please complete the registration form on Page 4. For more information visit **Workshops and Field Trips** at: www.bcminerals.ca or contact the MREPBC office at 604-681-4321 ext.108.

MINERAL EXPLORATION ROUNDUP 2006 - JANUARY 23-26

Registration for teacher and secondary student attendance is underway. More information on Roundup 2006 is available on page 1.

SEA-TO-SKY GEOLOGY & BRITANNIA FIELD TRIP - FEBRUARY 17

Natural Resources Canada, the MREPBC and the BC Museum of Mining are sponsoring a day-long field trip for teachers to introduce Howe Sound geology and the past, present, and future of Britannia. The morning will be devoted to geology, with the afternoon spent at the BC Museum of Mining, a National Historic Site, focusing on the mine geology, the history of this major underground copper mine, the remediation work to date, and future site plans associated with the Britannia Project. Bus transportation from Vancouver and lunch will be provided. There is a \$25 refundable registration deposit. **Registration deadline: February 5.**



Porteau Cove,
Howe Sound

ELEMENTARY AND SECONDARY WORKSHOPS IN NANAIMO - FEBRUARY 20



The MREPBC will be offering teacher workshops for the *K-3 Kids and Rocks: Geology and its Impact on Our World* (formerly the *K-3 Rocks and Minerals Integrated Science Kit*), *Grade 5 Integrated Resource Unit on Mining, Science of Mining, and Earth Science 11/Geology 12* resource units at the Nanaimo District Teachers' Association Pro-D conference.

For registration information visit the NTDA Web site: www.pdin68.ca or call 250-756-1237. All Vancouver Island teachers are invited, space permitting.

KEG COMMUNITY LECTURE SERIES - JANUARY-APRIL

Hosted by the Kamloops Exploration Group (KEG), this *free* lecture series is designed to improve the general public's understanding of Earth Sciences and mineral exploration. The lectures are a great opportunity to meet with local explorationists and find answers for your questions about rocks, minerals, and fossils. Lectures are held on Thursday evenings, about twice per month, at the Days Inn Kamloops. For information contact Ron Wells at 250-828-2585 or visit: www.keg.bc.ca/Lecture.html.



BC GEM SHOW: A WORLD OF CRYSTALS - MARCH 31-APRIL 2



Central Fraser Valley Fairgrounds in Abbotsford. Admittance to the show is *free* on Friday from 10:00am-4:00pm to **all school students** accompanied by a teacher and chaperoning adults. For more information about "Student's Day" or to book a time for your class to visit the show, please contact Donnamae Chionis via email at rocklady@shaw.ca or telephone at 604-277-3222. Web site: www.lapidary.bc.ca/gemshow.html.

KEMESS MINE TOUR FOR NORTHERN TEACHERS - SPRING 2006

The MREPBC in collaboration with Kemess Mine, and the PGTA and BVTA, is offering an all-day, fly-in field trip for teachers to the Kemess open pit copper-gold operation 480km northwest of Prince George in May or June 2006 (exact date to be announced). The site visit will include the surface operations, processing in the mill, waste rock disposal and environmental management. A chartered flight holding only 18 people will pick up teachers in Prince George and Smithers. The field trip is *free* but a *refundable registration deposit* of \$50 is required. To express interest in attending, see Page 4.



UPCOMING WORKSHOPS AND CONFERENCES

KAMLOOPS EXPLORATION GROUP (KEG) CONFERENCE

April 3-5, 2006. Kamloops, BC. For details visit www.keg.bc.ca.

MINERALS NORTH CONFERENCE

April 27-29, 2006. Mackenzie, BC. For details visit: www.mineralsnorth.ca.

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

FIELD TRIP OPPORTUNITIES

MREPBC TRAVEL SUBSIDIES



\$150.00 field trip travel subsidies are available to teachers who have attended MREPBC workshops. These funds can be used to help offset the costs of taking classes to mining or geoscience destinations. Download the application form at: www.bcminerals.ca/pdf/FTripSubsidy.pdf.

BC MUSEUM OF MINING

Britannia Beach, BC. Contact: Rory at 1-800-896-4044 ext. 226. Web site: www.bcmuseumofmining.org.

SFU EARTH SCIENCES LAB

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

COURTENAY DISTRICT MUSEUM AND PALEONTOLOGY CENTRE

Offers year-round field trips to the Puntledge River Elasmosaur (Late Cretaceous marine reptile) site and school tours. Contact: 250-334-0686 or visit: www.courtenaymuseum.ca.

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.



Event Registration

Materials Orders

MINERAL EXPLORATION ROUNDUP 2006

- I would like to attend *Roundup* for Pro-D on (please check one):
 - Mon. Jan. 23 Tues. Jan. 24 Wed. Jan. 25 Thurs. Jan. 26
 - I will require a TOC*.
- I would like to submit names of my secondary students to attend *Roundup* and explore careers in the minerals industry.

You will be contacted by the MREPBC with details on registration, TOC funding, nominations and student itinerary. **Deadline: Jan. 13.**

SEA-TO-SKY/BRITANNIA F/T - FEB. 17, 2006

- I will attend the Sea-to-Sky geology and historical Britannia Mines field trip on Feb. 17, 2006.

Please complete the contact information below and enclose your \$25 *refundable registration deposit*. Itinerary, bus pick-up location and confirmation will faxed or emailed. **Deadline: Feb 5.**

CIM MINING IN SOCIETY (MIS) 2006



- I would like to attend one day of *MIS* for Pro-D.
 - I will require a TOC*.
- My secondary class is exploring career/training options or mineral resources-related subjects. I would like to bring them to *MIS*.
- My elementary class is addressing mineral resources-related subjects this school year. I would like to bring them to *MIS*.
- My class requires a travel subsidy to attend.

You will be contacted by the MREPBC with additional details.

KEMESS MINE TOUR - SPRING 2006

- I would like to attend the Kemess mine tour. Please contact me with more details once a date has been selected.

Please complete the contact information below. You will be asked to send in your \$50 *refundable registration deposit* once the date is finalized.

**Please note: If applying for TOC support, please supply the names of your principal and district superintendent along with your contact information.*

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

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

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

Careers in the Minerals Industry is a MREPBC produced video (1996) that addresses career opportunities in the industry. It shows people in a wide variety of occupations that are involved in all aspects of mine development and operation, in corporate head offices, and in the mining supply and service sectors. The companion binder provides additional information on careers, training and earnings for secondary level students.

- Video Cassette³ \$20.00
- Video Cassette³ & Binder¹ \$30.00

Rocks and Dirt Just Aren't My Thing... Or Are They? This MREPBC produced video (2000) explores the mining process through the eyes of two students initially naive to the importance of minerals in their daily lives. They are introduced to the complete mining process from exploration to reclamation, including the roles of transportation and finance. The activity booklet, developed for intermediate level students, includes cloze activities, puzzles, art enlargement and other worksheets.

- Video Cassette³ \$20.00
- Video Cassette³ & Activity Book² \$30.00

¹ appropriate for secondary. ² appropriate for elementary. ³ appropriate for elementary and secondary.

MINING IN BC POSTER

- Please send me a **FREE** copy of the *Mining in BC* poster.



MINING IN BC BOOKMARKS

- FREE!** *Mining in BC* bookmarks _____ copies

MINERALS OF CANADA POSTER

- Please send me a **FREE** copy of the *Minerals of Canada* poster.



SAVE PAPER! RECEIVE *TEACHERS' UPDATE* BY EMAIL

- I would like to receive future *Teachers' Updates* by email.

Registration/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: _____