



# groundWORK

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## The Big Picture

The staff at *Mining Matters* has been busy over the last year. While maintaining existing partnerships and programming, we've cultivated new partnerships, further expanded our programming, and offered our resources across Canada.

In **Ontario**, we updated our junior resources and delivered several teacher workshops, including those presented at the *Prospectors and Developers Association of Canada 2009 International Convention and Trade Show*. We worked with Science North in Sudbury, developing resources to accompany its Dynamic Earth exhibit, *Diamonds*. And we partnered with ESRI, a geographic information system software company, to develop digital activities for our senior high school resource, *Discovering Diamonds*.

In northern Ontario, for the second year, we incorporated our Aboriginal Youth Outreach Program into the 2009 First Nations Natural Resources Youth Employment Program (FNNRYEP), facilitating employment prospects for Aboriginal youth.

In **Manitoba**, we presented teacher workshops for our three Manitoba curriculum-aligned resources, and we took our Aboriginal Youth Outreach Program to the inaugural five-week Manitoba Rangers Program.

In **British Columbia**, we partnered with the Mineral Resources Education Program of British Columbia and trained teachers to deliver our senior curriculum resource, *Discovering Diamonds*.

We're now introducing our education programs and resources to **Newfoundland and Labrador**. In November, we're delivering educator workshops and participating in the *Mining in Society Show* planned in conjunction with Newfoundland and Labrador Provincial Mining Week.

Future work at *Mining Matters* involves translating resources into French, expanding programming to **Québec**, increasing workshop delivery and student reach, producing new resources, and cultivating further education, industry, and government partnerships.

Please share this newsletter with other teachers and librarians.

Thank You!

## Cutting Edge Material

*Mining Matters* has a new poster rolling off the press this fall, the second in our series illustrating the mining industry's relationship to familiar products in our lives. *Cutting Edge* translates the speed, power, and grace of one of Canada's most popular sports, skating, into some of the metals and minerals that make it possible. The poster features prominent Canadian athletes and explores the equipment and venues that help them pursue glory, and even Olympic medals, in hockey, sledge hockey, figure skating, and speed skating.

Our first poster, *From Northern Lights to Urban Trails*, distributed in 2007, drew such an enthusiastic response that we printed over 20,000 for educators across Canada and developed a Web version for download. We look forward to your response to this latest education tool.

## PDAC '09: A Wealth of Information

At the *Prospectors and Developers Association of Canada 2009 International Convention and Trade Show*, we introduced teachers and over 150 students to the world of mining, enhancing their knowledge of both Earth science and the modern resource industry. Encouraged by our 2008 convention success, we again delivered three days of educational programming—one for teachers and two for students—incorporating guest speakers, hands-on learning activities, and visits to the Trade Show floor.

The 2009 Teachers' Day program, on Sunday, March 1, included a tour of the Trade Show floor, networking opportunities, a presentation about the professional roles and global locations involved in resource development, and *Mining Matters* workshops that provided resource kits and the training to use them. Participants were enthusiastic about the information and resources provided and appreciated learning about the resource industry's international nature and the amazing technologies it uses.

For students, we designed a complete convention experience, providing transportation from their school, our signature red *Mining Matters* T-shirts, curriculum-aligned programming, and group leaders to guide them through their day. On Monday, March 2, we welcomed students from Forest Manor Public School, Toronto, with their teachers and parents. On Tuesday, March 3, we worked with students from Pine Ridge Secondary School, Pickering, and Wexford Collegiate School for the Arts, Scarborough.



Our visiting secondary students began their day with the challenging job of simulating geological field mapping with Beth Halfkenny from Carleton University. Students mapped outcrops, interpreted the subsurface structure, and targeted zones of mineralization for further exploration. Nicole Januszczak, from DeBeers, then enlightened students about the joys and trials of real field exploration geology. Her stories about building an outhouse, cooking supper, and experiencing beautiful landscapes as well as exciting adventures left many students wishing to follow in her footsteps.

Continuing the theme of technology in mining, students attempted to build a model head frame to lift a load of marbles. Group brainstorming led to some ingenious solutions and lots of fun. Afterwards, Mary Kerr, a high school student and member of the Young Mineralogists Club of Toronto, shared her passion, skill, and success at collecting outstanding minerals. The Scavenger Hunt on the Trade Show floor wrapped up a full day of learning.

## Setting Records

*Mining Matters* has set a new record. During the 2009 *Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Mining in Society Show*, held in Toronto, May 10-12, we educated over 7,000 students, teachers, and members of the public about the importance of mineral resources. The *Mining in Society Show* is an educational and interactive show with a mandate to help the general public and students appreciate and understand the mineral exploration and mining industries, their benefits to society, and the career opportunities they offer.

We delivered hands-on learning activities that complemented the show's pavilion themes: exploration, mining, processing, sustainability, products and fabrication, education, and new frontiers. Our activities had participants do the following:

- Try to identify a mineral sample by using physical property tests
- Match everyday products to the minerals used to make them
- Match bike parts to the rocks and minerals used to manufacture them
- Match photos of mine sites during mining and after reclamation
- Investigate methods of particle separation, including sieving, magnetic separation, and flotation
- Colour pictures of the stages of the mining cycle

In the **Amazing Mine Challenge**, participants tracked down answers to questions in our Challenge booklet. Completed booklets were entered in a draw for prizes, including MP3 players and bikes.

*Mining Matters'* participation in the 2009 *Mining in Society Show* was hugely successful. We hope for similar success at the *Mining in Society Show* in St. John's, Newfoundland and Labrador, in November 2009, and Vancouver, B.C., in May 2010.

## Brought to You by CGF

*Mining Matters* has some tremendous supporters, for which we are very grateful. At this time, we would like to thank the Canadian Geological Foundation (CGF) for two grants, totalling \$11,000, recently given to *Mining Matters* from the Foundation's Jérôme H. Remick III Endowment Trust Fund.



The grants provide a second year of support for *Mining Matters'* two *groundWORK* newsletters, which are distributed to nearly 10,000 elementary and secondary school educators. The newsletters often include supplementary teaching resources such as posters, puzzles, and DVDs. The CGF funding has also enabled us to develop and produce our latest supplementary teaching resource, the poster *Cutting Edge*—included with this year's newsletter.

The Canadian Geological Foundation is dedicated to furthering geoscience in Canada and plays a key role in sustaining geoscience education, outreach, and awareness across the country.

## 2010 Connection

For the last few years, *groundWORK* has featured a 2010 Connection, in honour of the Olympic Games coming to Vancouver, B.C. in February 2010. This year, in the last of the series, we have two pieces: one about jade, B.C.'s official gemstone, and the other looking at the BC Museum of Mining.

### Jade: Stone of Heaven

Jade has a split personality. Until 1863, all jade was considered equal, but then a French mineralogist determined that "jade" was in fact two different minerals: jadeite and nephrite, similar in appearance and properties, but with different chemical compositions.

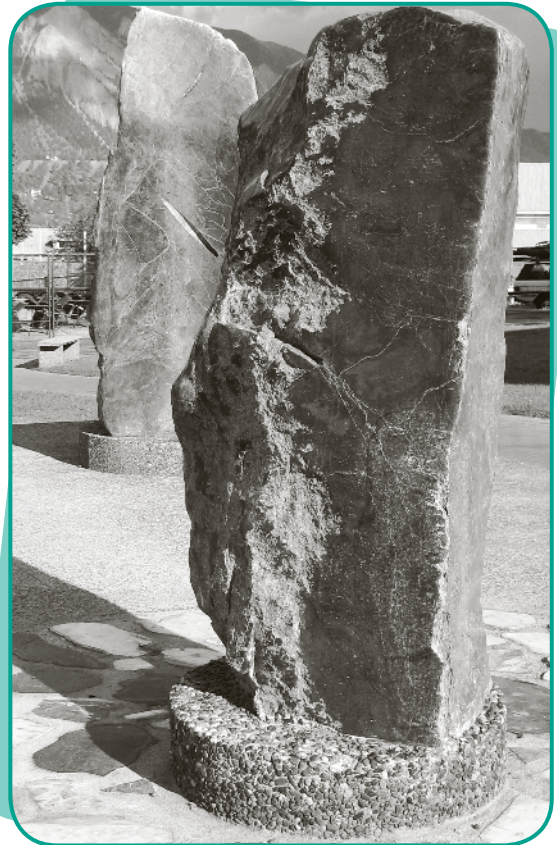
Jadeite, the rarer form, is considered the finer of the two and used mostly for jewellery. It occurs in black, white, mauve, orange, and brown hues, but the most highly prized varieties are an intense translucent green. Nephrite, the more common mineral, is usually opaque, and comes in green, white, yellow, and black. Both are extremely tough minerals—their tight interlocking crystals make them exceptional material for carving—but it is nephrite that the world recognizes in the intricate *objets d'art* carved by the Chinese for over 5,000 years. And it is nephrite that is one of Canada's least recognized exports, for few know that B.C. is the world's top producer of nephrite. In fact, from 1975 to 2005, B.C. annually produced more than three-quarters of the world's total nephrite production, worth approximately \$3.5 million.

Nephrite had its beginnings in B.C.'s history in the Lillooet area, north of Vancouver, where it was first discovered 5,000 to 6,000 years ago by Aboriginal people, who used it to make tools and trade goods. The mineral had been created between 50 and 185 million years ago, when two massive tectonic plates collided and buckled upward to create the Cordilleran mountain region that stretches from the Yukon to Mexico. During that process, heat and pressure acted on soft serpentine, where it was forced against igneous rock such as granite, transforming it into hard nephrite.

B.C.'s global reputation as the primary source of nephrite began during the Cariboo Gold Rush in the 1860s, when Chinese miners found it alongside gold. To them, gold was only wealth, while jade was priceless. They knew it as the "stone of heaven," representing good luck, health, and happiness, and in the 1900s, shipped tons of it to China.

In the 1950s, the discovery, near Lillooet, of a high-quality, apple-green clear nephrite once again bolstered shipments, and from 1957 until the end of the 1960s, the area produced more rough nephrite jade than the rest of the world combined. New deposits discovered in northern B.C. attracted the industry's attention, but Lillooet remained B.C.'s historic Jade Capital.

In 1968, jade became the official gemstone of B.C. Today, Lillooet commemorates its place in B.C. history and honours the provincial gemstone with a unique nephrite jade park and walk, featuring 30 different pieces of the mineral. The polished faces of the four boulders displayed outside the town's museum invite touch and inspire visitors to hunt down the smaller monuments distributed throughout the town and surrounding area.



## BC Museum of Mining

With the 2010 Olympic Games coming to Vancouver, B.C., many Canadians are making plans to attend them and also to explore B.C. For those interested in geology and mining, an interesting spot lies halfway between the Vancouver and Whistler Olympic competition locations.

The BC Museum of Mining, located beside the Sea to Sky Highway in Britannia Beach (south of Squamish), offers an in-depth look—literally—at a mine that was once the largest copper mine in the British Commonwealth. At the museum, visitors can experience the underground on a train ride deep inside a mining tunnel, pan for and keep real gold, and look inside the Mill—a National Historic Site. They can see mining demonstrations, as well as displays that explore B.C. mining history, and measure themselves against the giant tires of a Super-Haul Truck. They might even recognize the site from scenes in *X-Files* or *Scooby Doo 2*.

The Britannia Mine opened in 1904, and until its closing in 1974, over 50 million tons of ore were extracted from it. Metals produced from that ore were copper (650,000 tons), zinc (137,000 tons), lead (17,000 tons), cadmium (500 tons), silver (188 tons), and gold (15.6 tons/500,000 ounces). The mine's preservation and recent restoration provides an excellent opportunity to learn more about B.C.'s mining practices of the past, present, and future.

To learn more about this historic site, go to [www.bcmuseumofmining.org](http://www.bcmuseumofmining.org)



Image courtesy of the BC Museum of Mining

## Field Trip Subsidies

The *Mining Matters* Field Trip Subsidy Program allots up to \$5,000 annually to help teachers enrich their school-based geoscience program. Any Ontario teacher who has completed an in-service workshop and uses a *Mining Matters* resource kit in the classroom may apply for the \$10-per-student subsidy for a geology or mining-related field trip.

Subsidy applications are considered on a first-come, first-served basis. We ask teachers and students to submit a summary of their experiences at the end of their adventure. Go to our Web site for field trip suggestions and to download an application form.

For more information, please call 416-863-6463, ext. 321, or e-mail [pdacmm@pdac.ca](mailto:pdacmm@pdac.ca)

## Four Rockin' Field Trips

Museums give us great indoor opportunities to learn about Earth composition, complexity, and history, but there's nothing like an outdoor look at the Earth's wonders to get a sense of their scale and place in time. Here are four field trip destinations that display evidence of their geological heritage in parks and gardens, or on walks.

### University of Waterloo: Peter Russell Rock Garden

Between the Biology and Math buildings at the University of Waterloo lies the Peter Russell Rock Garden, home to over 40 beautiful rock specimens. They are primarily from Ontario, but also represent Newfoundland and Labrador, Québec, Saskatchewan, Alberta, and B.C., as well as Pennsylvania.

On each rock, a bronze plaque provides information about its geological age, name, location, and also names the donors. The rock collection includes jasper conglomerate, argillite and quartzites, Gowganda conglomerate, glacial striated quartzite, Jacobsville sandstone, and basalt from the Sault Ste. Marie and Elliot Lake area. Gold ores come from Timmins and Hemlo, anorthosite and iron ore from Wawa, banded iron formation from Timiskaming, granite from Vermilion Bay, and stromatolitic marble and amethyst from Thunder Bay.

To learn more, go to <http://www.earth.uwaterloo.ca/outreach/rockgarden/index.html>

## City of Waterloo: The GeoTime Trail

In 2007, in Lookout Park, the City of Waterloo opened a GeoTime Trail as part of celebrations marking the city's 150th anniversary.

The GeoTime Trail, brainchild of Alan Morgan, a University of Waterloo Earth and Environmental Sciences professor, traces Waterloo's geological past with interpretive signs along a 4.567 km route. The distance of the trail corresponds to the current estimated age of the Earth at 4.567 billion years. Every metre of the trail marks one million years of geological time; each millimetre represents 1,000 years. Walking along it, individuals can appreciate the immensity of geological time and see where geological periods start and end. They can learn when different biological organisms appeared on Earth and when major catastrophic events took place. For example, all of human history, in terms of agriculture and urban settlement, is represented by the last 10 cm of the trail.

The Waterloo GeoTime Trail, the first of this type in Canada, was developed as a Canadian contribution to the UNESCO-sponsored International Year of Planet Earth in 2008.

To learn more, go to <http://www.waterloo.ca/desktopdefault.aspx?tabid=2106>

## Haileybury: RockWalk Park

Haileybury sits in the Timiskaming area of Ontario, which features a geological diversity that might be among the best in the world. RockWalk Park, an outdoor geological garden, is located beside the Haileybury School of Mines. The garden features large samples of ore, collected from mines across the country, that illustrate various rock types, including semi-precious and unusual specimens.

The rock and mineral exhibits in the park are arranged along interconnected pathways according to type of ore and theme: Metallic Ore, Non-metallic Ore, Local Rock Type, Unusual Geological Structures, Prospecting Guides and Stains, Cultural Exhibits, and Semi-precious Minerals.

A key feature of the park is the inclusion of cultural displays that depict the role that rocks and minerals have played throughout human history. Also interesting are the rocks that exhibit fluorescence under ultraviolet light—a night visit might be required! A tour brochure, available at the park entrance, guides visitors, and information plaques help identify the displays. School tours are available.

For more information, go to <http://rockwalkpark.com>

## Almonte: Metcalfe Geoheritage Park

In May 2010, Almonte, located 50 km southwest of Ottawa, will officially open Metcalfe Geoheritage Park, an outdoor space highlighting the area's geodiversity and geohistory. This park could be the first of its type to be opened by a municipality anywhere in the world.

Large blocks and boulders representative of the regional landscape are being moved to the park site, situated in town beside the Mississippi River lower falls. Stromatolites, thrombolites, and biofilm structures,

abundant in the local strata, will be given special emphasis in the displays. About half the blocks within the park are sedimentary dolostone from nearby bedrock sources. The random orientations of bedding (depositional layering) in these blocks will allow visitors to learn how a compass is used to measure the orientation of tilted strata, an important step used by geoscientists to unravel the geohistory of layered rocks that have been folded by compression.

Metcalfe Geoheritage Park is named after the late Dr. Archibald Metcalfe, a long-time local physician and politician who also contributed greatly to the program of municipal hydro systems in the province as Hydro Commissioner. The park has no Web site yet, but you can look for the latest news on the Internet, using the search term "Metcalfe Geoheritage Park."

## Reaching out to Aboriginal Youth

In 2007, *Mining Matters* began focusing on Earth science and mineral industry educational programming for Aboriginal youth in northern Ontario. Over the next year, we visited 11 Aboriginal communities to deliver workshops. In 2008 and 2009, we offered our Aboriginal Outreach Program to youth aged 16–19 at the First Nations Natural Resource Youth Employment Program (FNNRYEP) in Upsala, Ontario. In 2009, we also expanded our program to Manitoba, participating in the inaugural Manitoba Rangers Program.

*Mining Matters* provided six days of thematic educational programming in Ontario and eight days in Manitoba. The themes included introduction to rocks, minerals, mining, and geology; mineral exploration; environmental science; careers in the mining industry; and land reclamation and rehabilitation. The Ontario session included a tour of North American Palladium's Lac des Iles Mine operation, and in Manitoba, HudBay Minerals provided a tour of their mining and smelting operations in Flin Flon.

To help educators learn more about our Aboriginal Outreach Program, we now feature an Aboriginal Outreach page on our Web site. It highlights the programming we offer and provides links to other resources concerned particularly with Aboriginal education in the mineral resources industry.

To learn more or to book workshops, contact our Aboriginal Education Specialist Barbara Green Parker, at 416-863-6463, ext. 323.

To see our Web site, go to [www.pdac.ca/miningmatters](http://www.pdac.ca/miningmatters)



# Discovering Diamonds Updates

## Ontario Grade 12 SES4U Revisions

The Ontario Grade 12 Earth and Space Science course (SES4U) has undergone an overhaul as part of the secondary science curriculum review. In response to feedback from teachers and interested parties, the main changes have been to rationalize the Earth science content from four strands into three, and to expand the astronomy content from one strand to two. The number of specific expectations remains fundamentally the same.

The good news for users of our senior curriculum resource, *Discovering Diamonds*, is that all the content remains relevant and topical for the revised course. The 21 activities satisfy a large percentage of expectations in the Earth Materials and Geological Processes strands, plus a selection in the other four strands. Please e-mail us if you are interested in receiving the updated curriculum correlation document for Ontario secondary curricula.

## ArcGIS

*Mining Matters* now offers our first learning resource for geographic information system (GIS) software. Partnering with ESRI Canada, we have adapted four hands-on activities from our senior curriculum resource, *Discovering Diamonds*, into a multi-part lesson that teaches high school students the use of ArcGIS, ESRI's suite of GIS software

products. These activities were showcased at the Ontario Association of Geographic and Environmental Educators Conference in October.

Following a self-guided activity manual, students use a wide range of ArcMap skills to manipulate and display data. The lesson effectively demonstrates how GIS technology is valuable for investigating Earth science issues—in this instance, where diamonds are formed and how they are found. The activity manual, master answer pages, and all data files are free to download from the ESRI Canada Web site, K–12 resource pages, and from the *Mining Matters* Web site.

Go to [www.esricanada.com](http://www.esricanada.com) or <http://www.pdac.ca/miningmatters/educators/secondary.html>

The first part of the lesson uses global data sets of earthquake epicentres, surface velocities, and the locations of diamond mining areas. Students study the relationships between these data sets to deduce the tectonic setting of most diamond mines. The second part of the lesson focuses on exploration for diamond bearing kimberlite in northern Ontario's James Bay region. To target kimberlite source locales, students interpret glacial features to determine the ice flow direction and examine a map of kimberlite indicator mineral distribution. They then refine the target zone to a diamondiferous kimberlite using the garnet chemistry at each potential source.

This new lesson is suitable both as a stand-alone task for teachers of geography, computer technology, or Earth science, or as a complement to the hands-on activities in *Discovering Diamonds*.

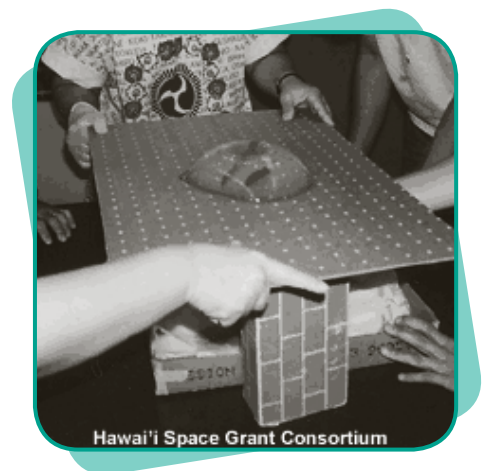
# Earth Science Activities

We featured [www.earthlearningidea.com](http://www.earthlearningidea.com) when the Web site was in its early stages. It's worth another look; the site now offers dozens of activities that explore Earth materials, geological processes, and more. Search by categories or key words. Here are just a few samples:

- **Grinding and Gouging**  
Demonstrate how moving ice can grind away rocks  
[http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/60\\_Grinding\\_gouging.pdf](http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/60_Grinding_gouging.pdf)
- **Eureka! Detecting Ore the Archimedes Way**  
Measure density using a stick, string, a ruler, a bucket, and a bottle of water  
<http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/Archimedes.pdf>
- **Laying Down the Principles**  
Sequence the events that form rocks through applying stratigraphic principles  
[http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/Laying\\_down\\_the\\_principles.pdf](http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/Laying_down_the_principles.pdf)
- **Squeezed Out of Shape**  
Learn how rocks are distorted by Earth movements  
[http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/51\\_Squeezed\\_out\\_of\\_shape.pdf](http://aegsrv2.esci.keele.ac.uk/earthlearningidea/PDF/51_Squeezed_out_of_shape.pdf)

And from the University of Hawaii comes this idea.

- **Gelatin Volcano**  
Learn about magma movement and volcanic landforms in a hands-on way, using gelatin and coloured water to emulate dike-forming magma  
[http://www.spacegrant.hawaii.edu/class\\_acts/GelVol.html](http://www.spacegrant.hawaii.edu/class_acts/GelVol.html)



# Four Billion Years and Counting: Canada's Geological Heritage

A new popular Earth science publication will be released in 2010. *Four Billion Years and Counting: Canada's Geological Heritage* will present the latest view of Canada's fascinating geology and its impact upon the lives of all Canadians. Written for a general audience, this multi-faceted story will demonstrate the influence of geology on our national wealth and health, using a variety of visuals to enhance and supplement the text.

The book combines contributions from the Canadian Earth science community, including academia, government, and industry. It has been accepted as one of Canada's principal contributions to the International Year of Planet Earth, wrapping up in 2009, and will be published jointly by the Canadian Federation of Earth Sciences and Nimbus Press.

To learn more about the book, please visit the Earth Sciences Canada Web site: <http://www.earthsciencescanada.com/4by/>



Deformed Cretaceous sediments at the Cardinal River Coal Mine, near Hinton, Alberta

## Good News 4U

### Strength in Numbers

Grade 12 Earth and Space Science (SES4U) teachers often work in isolation as the only individual covering the course in a school. And with a limited number of schools offering this university-level science material, opportunities for networking are few and far between.

*Mining Matters* and a number of our geoscience education partners have been reaching out to support this community of SES4U teachers. It appears that our collective efforts, in conjunction with other factors, are bearing fruit. As of Fall 2009, more schools in the Toronto and Ottawa areas are offering SES4U, meaning more teachers to network with. Twenty-three institutions in the Toronto District School Board have credits running this September, up from single digits only three years ago. Overwhelmingly, teachers report that they and their students enjoy and are stimulated by the material.

If you have any questions about the new course, or are looking for teaching ideas or suggestions for resources, take a look at our Web site in the Educators section, or e-mail us at [pdacmm@pdac.ca](mailto:pdacmm@pdac.ca)

## University of Waterloo Advanced Standing

The Waterloo Region District School Board (WRDSB) has made a groundbreaking arrangement with the University of Waterloo, aligning its senior high school Earth and Space Science course (SES 4U) with the university's first year EARTH 121 course. The SES 4U course will be recognized for credit for all WRDSB students who complete it and enter an Earth sciences program at the University of Waterloo.

Geoscience represents an important cornerstone in Canada's economy; our country is a world leader in the resource and environment industry. However, it will be difficult to maintain that position if the growing shortage of geoscientists in Canada is not reversed. The SES 4U course aims to do that by instilling in students awareness, enthusiasm, and passion for the geosciences and by launching them early onto career paths in the geosciences.

Teachers in the WRDSB will collaborate with the University of Waterloo Faculty of Science on professional development days, field trips, and other activities to keep current on emerging trends and opportunities in the geosciences.

## Ghost Mountains and Vanishing Oceans: North America from Birth to Middle Age

Over time, a jigsaw puzzle of geological plates drifted together to form today's continents, but the puzzle is a work in progress, as the plates continue to move. In *Ghost Mountains and Vanishing Oceans: North America from Birth to Middle Age*, geologist John Wilson and geophysicist Dr. Ron Clowes narrate the tale of Earth's coming-of-age.

The authors also tell the story of Lithoprobe, a project created in Canada in the 1980s that is viewed as the best of its kind in the Earth sciences field. It combines multidisciplinary studies of the Canadian landmass and surrounding offshore margins to determine how the northern North American continent has formed over geological time from 4,000 million years ago to the present.

Highlighted with informative sidebars and photographs, this book will help readers gain a better appreciation of the Earth sciences.

To hear author Ron Clowes being interviewed on CBC Radio "Quirks and Quarks," go to <http://www.cbc.ca/quirks/archives/08-09/qq-2009-05-30.html>

## You Could Win!

Complete our [Readership Survey](#) and you could win! See the enclosed Survey for details. Need another Survey? Download a copy from the Educators page on our Web site. And while you're there, explore *Mining Matters'* complete resource collection.

Go to [www.pdac.ca/miningmatters](http://www.pdac.ca/miningmatters)

## Mining Matters Goes WHERE?

Launched in celebration of the International Year of Planet Earth, the first annual **WHERE** Challenge asked Canadian students aged 10–14 years two questions: What on Earth is in your stuff and **WHERE** on Earth does it come from?

Hundreds of students submitted imaginative contest entries, featuring analyses of everything from pencils and light bulbs to sports equipment and mascara. Three national and multiple regional cash prizes, totalling over \$16,000, were awarded to winning entries.

*Mining Matters* participated in the Ontario regional judging committee, which awarded prizes to entrants from Georgetown District High School (GDHS), Halton Hills, and Oro-Medonte Township, Simcoe. One GDHS regional winner also won a national prize, earning his school a cash prize as well. *Mining Matters* staff attended the cheque presentation assembly at the school.



To see the winning entries or to learn about the 2010 **WHERE** Challenge, which will accept entries until March 1, 2010, go to <http://www.earthsciencescanada.com/where>

## Exploring Careers

The Mining Industry Human Resources Council (MiHR) presents the *Explore for More* video library, featuring brand new, three-minute videos showcasing some of Canada's mining and exploration workers.

To see the videos, in French or English, look under [Online Resources](#) at <http://www.acareerinmining.ca> Several of the videos are also available on YouTube: <http://www.youtube.com/exploreformore>

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*Mining Matters* creates exceptional educational resources to meet provincial Earth science curriculum expectations. Since 1994, this charitable organization has reached more than 400,000 teachers and students through resources that promote awareness of the importance of rocks, minerals, metals, mining, and Canada's geology. *Mining Matters* prides itself on building long-term partnerships with teachers by providing relevant, accurate, and authentic Earth science resources for the classroom, designed by teachers for teachers.

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