

Where on Earth does your stuff come from?



Taylor Drew

The Earth rocks!

While rocking out to your favourite song on your MP3 Player, rocks, minerals and oil are probably the furthest thing from your mind. Did you know, though, that these materials play a vital role in the making of your MP3 Player? All sorts of cool stuff like your cell phone and computer need raw materials that are found in the Earth, like oil and minerals. Even though MP3 Players are products of modern technology, they are made of these Earth materials that were formed millions of years ago.

Join Drew and Taylor on their adventure to Discovery Centre, which is located in

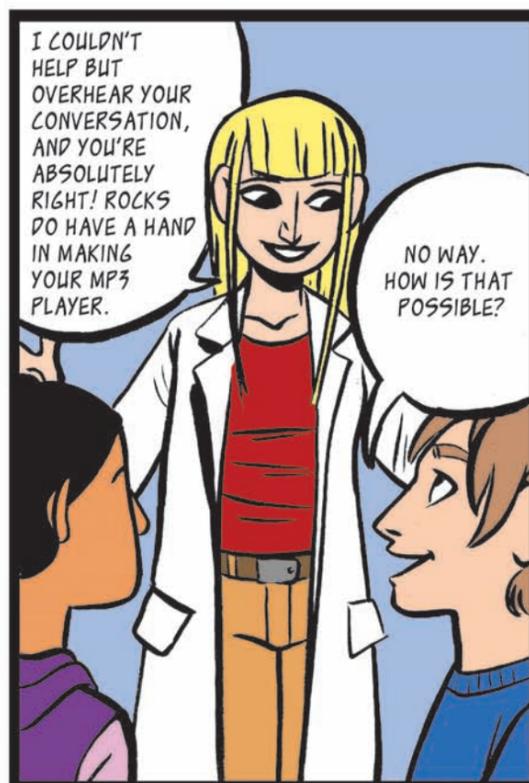
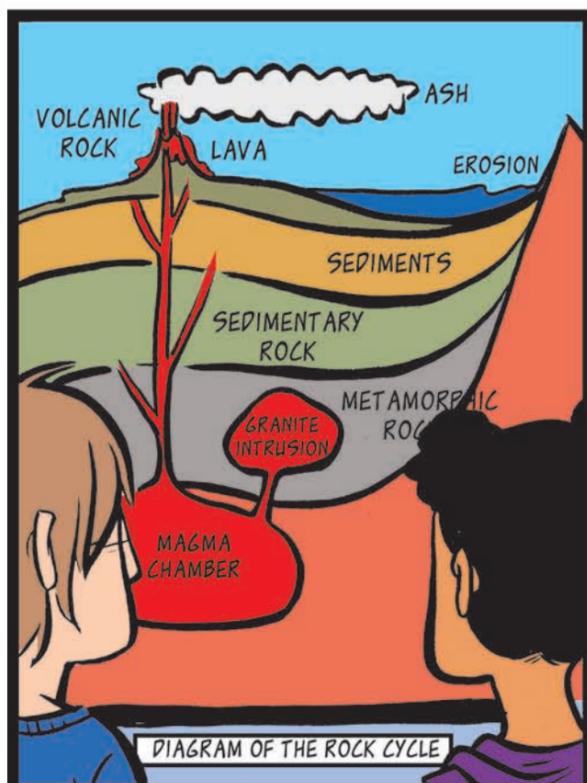
downtown Halifax, as they learn more about the Earth and how it plays a big role in the making of cool stuff, like MP3 Players. Discovery Centre has provided an interactive, innovative and interesting experience for Nova Scotians for more than 20 years. Be sure to visit the centre so you can learn more about science and technology.

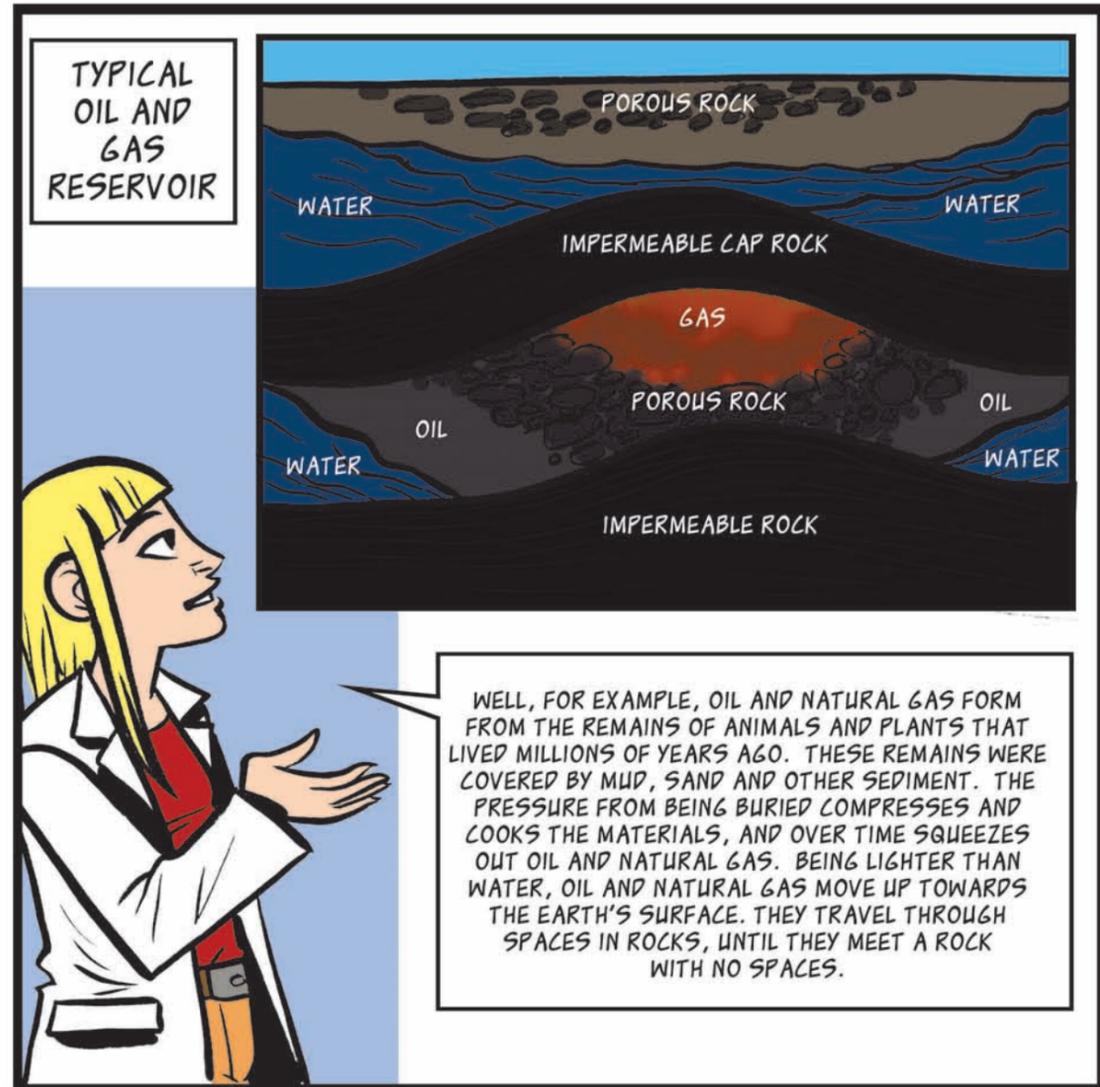
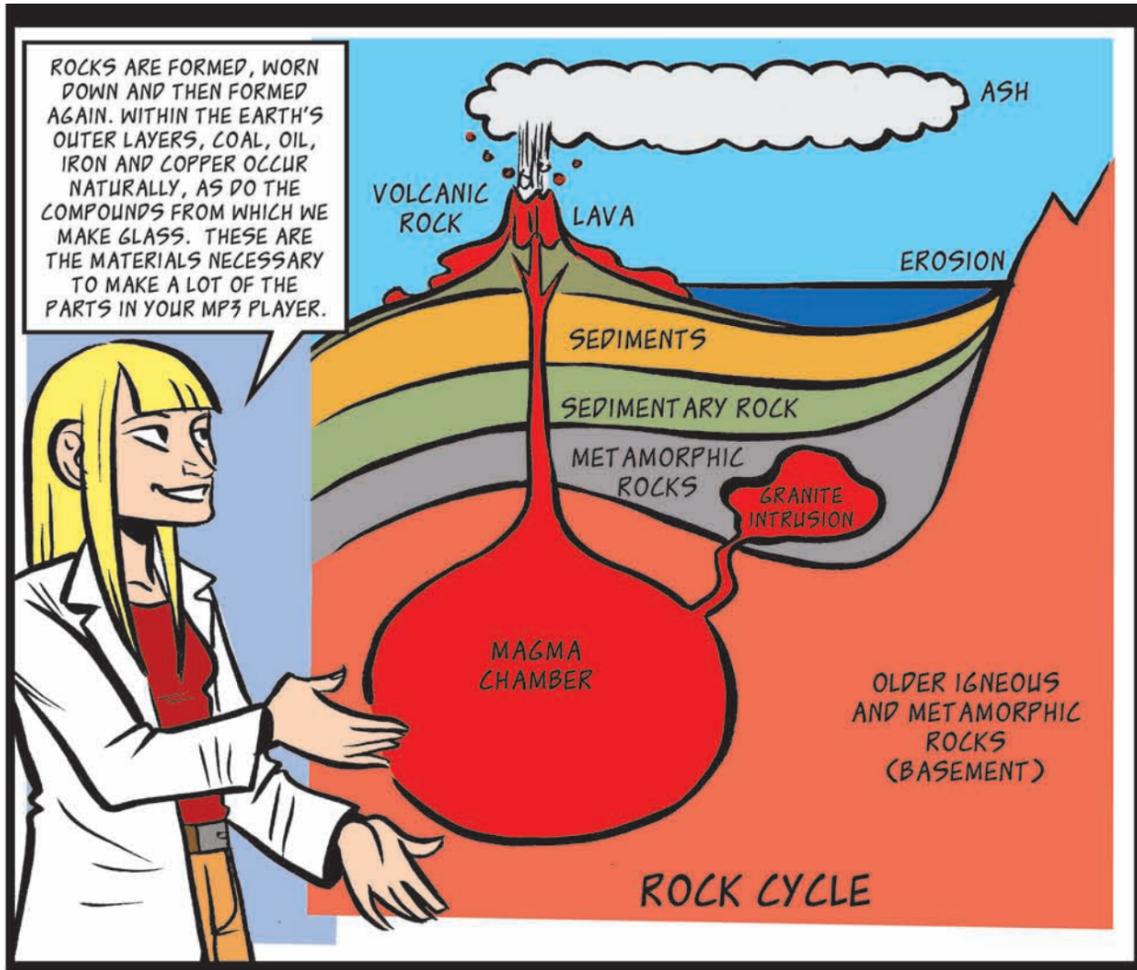
The Atlantic Geoscience Society (AGS) brings together earth scientists from universities, government institutions, the mining and petroleum industries, and consultants in the Atlantic Provinces. The primary goal of the Society is communication of ideas and

information about the Earth and earth science to both the professional geoscience community and the general public.

Also, for students who are 10 to 14-years-old, don't forget to take the WHERE Challenge. Answer the questions: What on Earth is in your stuff and WHERE on Earth does it come from and you could win big. Get creative and find out interesting facts about your stuff. Deadline for submissions is February 28, 2009.

Now, let's discover where on Earth your stuff comes from...





HOW OIL AND GAS ARE FORMED:

OIL AND NATURAL GAS TRAVEL THROUGH ROCKS THAT ARE POROUS. THESE ROCKS HAVE CONNECTING SPACES, LIKE A SPONGE OR SWISS CHEESE.

WHEN OIL AND GAS REACH OVERLYING ROCKS THAT ARE NOT POROUS, THEY CANNOT ESCAPE AND ARE TRAPPED. THESE NON-POROUS ROCKS THAT TRAP OIL AND NATURAL GAS ARE CALLED CAP ROCKS.

MINERALS AND MINING IN NOVA SCOTIA

MINING IN NOVA SCOTIA: COAL, ANHYDRITE, GYPSUM, LIMESTONE, PEAT, SALT, CRUSHED STONE, SAND AND GRAVEL, CLAY, BARITE, SHALE, QUARTZ, DOLOMITE, GOLD, LEAD AND ZINC

- FROM ECONOMIC IMPACT OF THE MINERAL INDUSTRY IN NOVA SCOTIA - 2006

ENERGY COMPANIES FIND OIL AND NATURAL GAS BY DRILLING WELLS. NATURAL GAS CAN BE PROCESSED TO MAKE PROPANE FOR YOUR BARBECUE TANK OR BUTANE FOR THE BARBECUE LIGHTER. NATURAL GAS CAN BE SHIPPED STRAIGHT TO CUSTOMERS WITHOUT EXTRA PROCESSING TO BE USED AS A FUEL TO HEAT HOMES AND BUSINESSES.

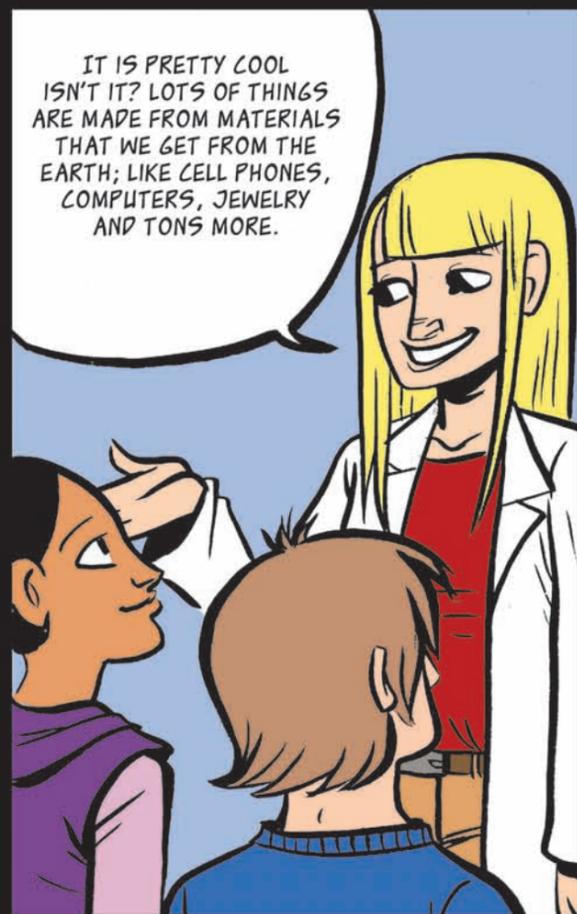
OIL IS SENT TO REFINERIES TO PRODUCE GASOLINE FOR OUR CARS AND TRUCKS AND FURNACE OIL FOR OUR HOMES. FACTORIES REFINE THE OIL INTO VARIOUS DIFFERENT CHEMICALS, AND USE HIGH TEMPERATURE FURNACES TO CREATE PLASTIC PELLETS. THESE PELLETS ARE SOLD TO VARIOUS COMPANIES THAT MOLD THEM INTO CONSUMER PRODUCTS.



OH, I SEE. SO PLASTIC IN THE MP3 PLAYER COMES FROM OIL.

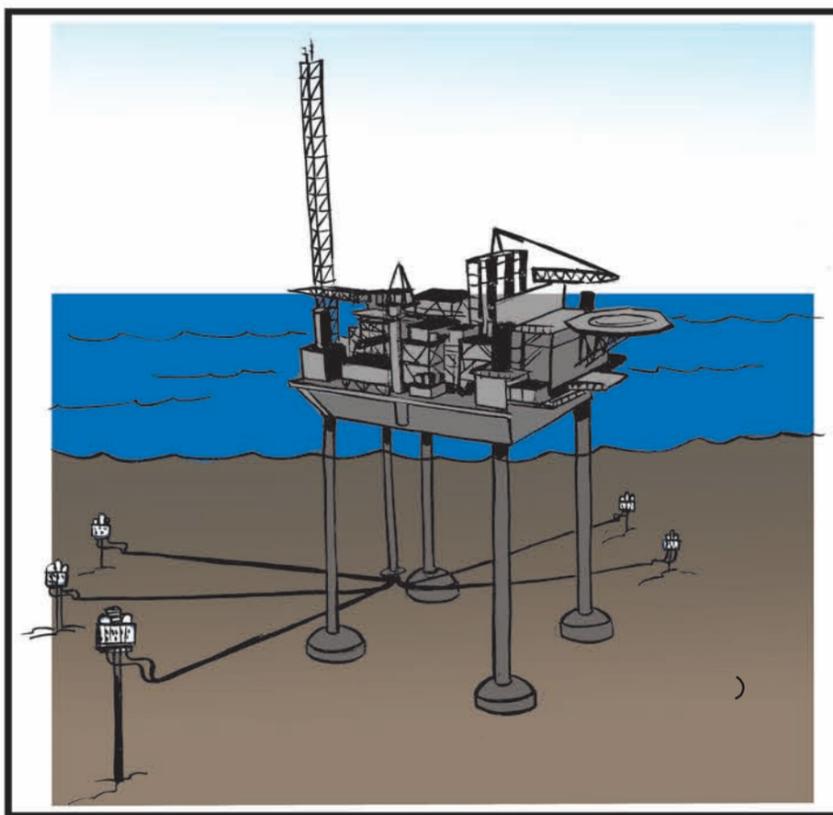


THAT'S SO COOL! I DIDN'T KNOW THAT THE EARTH HAD SUCH A BIG PART IN CREATING SOMETHING AS AWESOME AS A MP3 PLAYER! I BET ALL THE STUFF USED TO MAKE MY MP3 PLAYER COMES FROM FAR AWAY, THOUGH.



IT IS PRETTY COOL ISN'T IT? LOTS OF THINGS ARE MADE FROM MATERIALS THAT WE GET FROM THE EARTH; LIKE CELL PHONES, COMPUTERS, JEWELRY AND TONS MORE.

DID YOU KNOW THERE ARE A FEW ENERGY COMPANIES AROUND HERE? FOR EXAMPLE, ENCANNA IS A LARGE OIL AND NATURAL GAS COMPANY. IT HAS AN OFFICE RIGHT HERE IN HALIFAX WHERE IT COORDINATES DEVELOPMENT OF ITS DEEP PANUKE NATURAL GAS FIELD.



THE NATURAL GAS IS IN ROCKS THREE KILOMETERS BELOW THE SEA FLOOR, ABOUT 250 KM OFFSHORE FROM HALIFAX.



WOW, COOL!



NOW WE'RE GOING TO GO BACK TO CLASS AND APPLY WHAT WE'VE LEARNED TODAY BY BRAINSTORMING WHAT WE CAN DO FOR THE WHERE CHALLENGE.

WHAT'S THE WHERE CHALLENGE?



where challenge

THE WHERE CHALLENGE IS A NATIONAL COMPETITION THAT CELEBRATES THE INTERNATIONAL YEAR OF PLANET EARTH. KIDS AND SCHOOLS ACROSS THE COUNTRY COMPETE BY ANSWERING THE QUESTIONS: **WHAT ON EARTH IS IN YOUR STUFF AND WHERE ON EARTH DOES IT COME FROM?** ALL ENTRIES GO INTO A DRAW FOR A FREE MP3 PLAYER!



AWESOME! LET'S WRITE AN ESSAY ON HOW MP3 PLAYERS ARE MADE, JUST LIKE WE LEARNED TODAY!

YEAH, WE COULD EVEN WRITE ABOUT THAT MP3 PLAYER THAT WE'RE GOING TO WIN!

Take the **where** challenge

and Win Big!

In celebration of the International Year of Planet Earth, the first annual WHERE Challenge is asking Canadian kids aged 10–14 years to discover the answers to these questions: What on Earth is in your stuff and WHERE on Earth does it come from?

Enter as a group or an individual. All you have to do is tell a story about what on Earth is in your stuff and WHERE on Earth it comes from.

Your story can be told through an essay, a poem, a song or a play, a painting or a poster, an audio, video or multimedia presentation or anything else you can dream up. Think hard, get creative!

For more details on the WHERE Challenge please visit www.earthsciencescanada.com



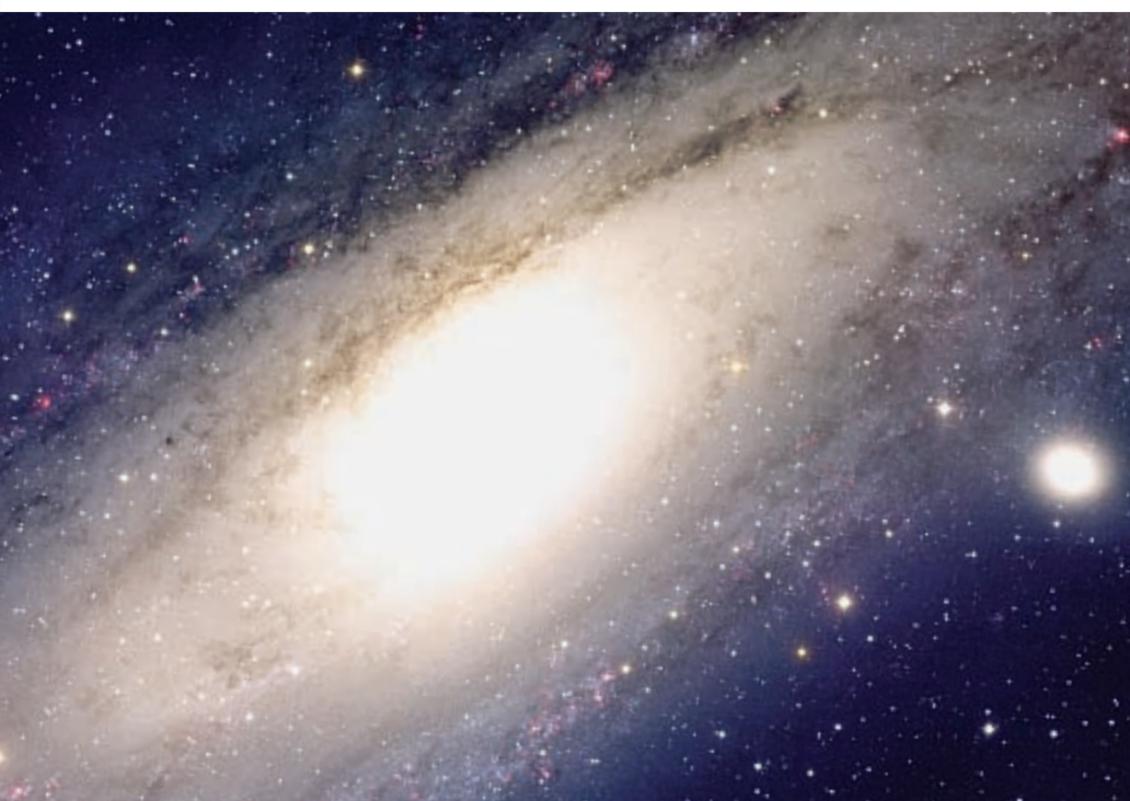
Sponsors



Teck

Entry deadline:

February 28, 2009



THE UNIVERSE IS INFINITE.

THE TIME YOU HAVE
TO TEACH YOUR KIDS
ABOUT IT ISN'T.

Discovery Centre 

www.discoverycentre.ns.ca

Atlantic Geoscience Society



<http://ags.earthsciences.dal.ca/ags.php>

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AGS supports EarthNet, your gateway to earth science education tools—activities, resources, virtual field trips, glossary, web sites, ask-a-geologist, geo-lessons, geology of communities and much more.



Chalk one up for Newspaper In Education

The **Newspaper In Education** program provides teachers with materials to assist in **teaching, reading, writing** and **thinking skills** through the use of The Chronicle Herald. Students use newspapers as a **living textbook**, an exciting means to motivate them and bridge the gap between the classroom and the real world. Schools can purchase copies of The Chronicle Herald at reduced rates.

For more information on our Newspaper in Education program contact:

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