



Praxis: The Science and Technology Hotline



"The scientist is not a person who gives the right answers, he's one who asks the right questions." Claude Lévi-Strauss

Scientist of the Month:



- Name: Marie Curie
- Dates: Nov 7, 1867 - July 4, 1934
- Area of expertise: Radiation
- First woman in Europe to earn a doctorate; coined the term 'radioactive'; discovered polonium and radium; won 2 Nobel prizes; died from a blood disease, likely caused by exposure to radiation.

Back to School Edition

Welcome back to an exciting new school year!

My name is Tracy Warwick and I am the new Regional Executive Director of Praxis.

I grew up in Southern Alberta and received my Bachelor of Arts in modern languages at the UofL and later a diploma in computer technology at Mount Hood College in Portland, Oregon. I have worked in education administration at MHC and UofL for nine years.

If you require any science resources, or if you have any suggestions, please call our office at (403) 527-5365 or email praxis@praxismh.ca.

For anyone that isn't sure what Praxis can offer you and your class, here are just a few of the things we can do:

- Hands-on, curriculum-based learning kits
 - Classroom speakers and demonstrators
 - Arrange for STEM (Science, Technology, Engineering and Mathematics) based field trips.
 - Job shadowing
 - Yearly science conferences for grade 9 students
 - Science fair counseling
 - Science hotline
 - Family Science Olympics
 - On-line resources
- ... and much, much more!



We would be happy to assist with your classroom learning in any way we can.

Please contact our office or check our website (www.praxismh.ca) to book these resources. They do fill up quickly, so book early. And remember, all of these services are completely **free of charge!**

Upcoming Events

- Sept. 4: Annual WHERE challenge begins
- Sept 14: Star Party Sunridge Observatory 4:30 pm – late
- October 21-23: SEAWA watershed conference
- Oct 18– 27: Science and Technology Week
- Oct 26: Science Family Olympics
- Nov. 14 - 16: Science Council Conference

Regional Science Fair

I know that Science Fair isn't until March 22, 2014, but I thought I would get the ball rolling early.

Science Fair can be a lot of work, but the rewards of it are astounding! Science Fair participants not only gain valuable experience but can earn prizes at the regional as well as at the national level.

Praxis can provide resource material for teachers, students and parents.

Each year students from Medicine Hat travel to the Canada Wide Science Fair.. In 2008, 2011 and 2012, projects from Medicine Hat took the gold medal at Nationals. Our students have even participated in the World Science Fair!



MHC Drop-In

The Medicine Hat College Drop-In for grades 6-12 will be starting again on Monday Sept. 9. It is available on Mondays and Wednesdays from 4 PM – 6 PM in room B307.

Teachers will be available to help with Math, Physics, Social Studies, Biology, Chemistry and English.

Students from all schools (even homeschoolers) are welcome to use this service, **free of charge!**

Make Your Own Rock Candy!

Difficulty: Easy

Time Required: Days to weeks

Supervision: Minimal (boiling water required)



Materials List:

- 1 cup water
- 3 cups table sugar (sucrose)
- clean glass jar
- pencil
- Rough string or yarn
- pan or bowl for boiling water for making solution
- spoon or stirring rod
- Coffee filter or paper towel (if you plan on eating your experiment)

Here's how:

1. Tie the string to a pencil, then set the pencil across a glass jar. Make sure that the string hangs as low as possible without touching the bottom or sides. Remove for later.
2. Boil the water in a pan or bowl. (May require adult supervision)
3. Stir in the sugar, a teaspoon at a time. Keep adding sugar until it accumulates at the bottom of the pan and won't dissolve anymore. This means that your sugar solution is saturated. If your solution is not saturated, your crystals will not grow quickly. On the other hand, if you add too much sugar the crystals will grow on the undissolved sugar, rather than the string.
4. If you want coloured crystals, stir in some food colouring at this point.
5. Pour your solution into the glass jar. If you have undissolved sugar in the pan, avoid pouring it into the glass jar.
6. Place the pencil back over the jar and allow the string to dangle into the liquid.
7. Set the jar somewhere that it will remain undisturbed. Place a coffee filter or paper towel over the jar to prevent dust from falling in.
8. Check on your crystals after a day. You should be able to see the beginning of crystal growth on the string.
9. Once the crystals have 'climbed' up the string, your experiment is complete.

TIP: Crystals will form on a cotton or wool string or yarn, but not on a nylon line.

Checklist of Praxis Resources to book ASAP:

- Guest Speakers** for all S.T.E.M. subjects
 - Organize **Field Trips**.
 - Curriculum Support** for new classes/science teachers.
 - Science Fair** information.
 - Science Fair **Workshops** for teachers or parent councils.
 - Principals**: invite Praxis to speak to the teachers at a staff meeting so they will know what they can utilize in their classroom.
 - Hands on Learning Kits**:
 - ✓ Air and Aerodynamics/Flight
 - ✓ Astronomy/Sky Science
 - ✓ Building Things/Levers & Gears
 - ✓ Boats and Buoyancy
 - ✓ Conserving Our Environment
 - ✓ Digging For Dinosaurs
 - ✓ Electricity
 - ✓ Evidence and Investigation
 - ✓ Hearing and Sound
 - ✓ Insects and Creepy Crawlies
 - ✓ Magnetism
 - ✓ Powerhouse Model
 - ✓ Rocks and Minerals
 - ✓ Trees and Forests
 - ✓ Weather
 - ✓ Wetlands Discovery
- And many more!**

6th Annual WHERE Challenge



The WHERE Challenge asks students aged 9-14 to discover the answers to these questions: "What on Earth is in your stuff?" and "Where on Earth does it come from?" The Challenge runs Sept 4, 2013 to March 1, 2014 with thousands of dollars in prize money. You can enter as a student, group or school. Students are encouraged to use their imagination and create an educational story about non-renewable Earth resources found in an everyday item. For more details, please visit: www.earthsciencescanada.com/where.

Awesome Science and Math Websites

<http://yucky.discovery.com> : Exploring all the things about the human body you can't discuss at the supper table.

www.wonderville.ca : An excellent resource for science topics ages 6-12+ includes fun games for anyone that likes to "geek out"

www.nature.ca : Games and information to help understand genetics and genetic diversity

www.sciencekids.co.nz : Videos, games, facts and science fair project ideas

www.funbrain.com : Interesting math puzzles and games

For all your Science needs contact Praxis

Phone: (403) 527-5365
 Fax: (403) 528-6570
 Email: praxis@praxismh.ca
 Web: www.praxismh.ca

Founding Member of:



Don't forget to watch for our Saturday column "Science Smart" in the Medicine Hat Newspaper for more fun activities and experiments!!