

Praxis: The Science and Technology Hotline



"Nothing is too wonderful to be true if it be consistent with the laws of nature, and in such things as these, experiment is the best test of such consistency." - M. Faraday

Scientist of the Month:

- Michael Faraday
- B. Sept. 22, 1791
- Worked in chemistry and physics
- Largely contributed to the understanding of electromagnetism and electricity
- SI unit of capacitance = Farad
- Faraday's constant: the electrical charge per mole of electrons
- Did all of this with little formal education

Back to School Edition

Welcome back to an exciting new school year!

We have had another change in the office this summer. My name is Karly Burr and I am the new Regional Executive Director of Praxis.

A little bit about me. I grew up in Medicine Hat and graduated from CHHS. After high school I completed two years at MHC and recently graduated from the University of Alberta with my B.Sc. Immunology and Infection.

I am looking forward to helping everyone share in the joy of science. If you require any science resources, please call

our office at **403-527-5365** or email **praxis@praxismh.ca**. I would be excited to help you out.

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
- Job shadowing
- Yearly science conferences for students
- Science fair counseling



... and much much more!

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 11: Star Party Sunridge Observatory
 - Every Fri & Sat in Sept: Project Feeder Watch
- Police Point Interpretive Centre - Cozy up in a window and help count the birds
- Oct 15- 24: Science and Technology Week
- "Curiosity to Understanding: Past, Present and Future"

Have you thought about Science Fair??

I know that Science Fair isn't until March 26, 2011, but I thought I'd get the ball rolling early.

Science Fair can be a lot of work, but the rewards of it are astounding! Students learn not only the scientific process and scientific report writing, but also perseverance, presentation skills and critical thinking. It may be

difficult to work Science Fair into the curriculum, so why not start a Science Fair Club?

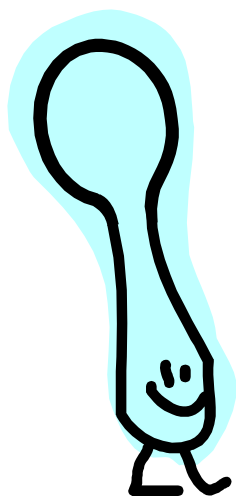
We can provide resource material for teachers, students and parents. One or two lunch hours a month is all it takes to ignite the Science Fair bug in students.

Science Fair participants can earn prizes at the regional level

as well as on a national level. Every year students from Medicine Hat travel to the Canada Wide Science Fair (CWSF). In 2008, a project from Medicine Hat took the gold medal at Nationals. CWSF 2011 will be in Toronto, On.

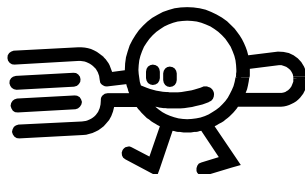
Call 403-527-5365 or email at praxis@praxismh.ca for more information.

Tuning Fork



Materials:

- A metal fork
- A metal spoon
- 2-3 feet of string



Directions:

1. Tie the fork to the middle of the string, so there are two free ends.
2. Tie one end of the string to your left index finger.
3. Tie the other end to your right index finger.
4. While holding your fingers near your ears, let the fork dangle in front of you.

5. Have a partner hit the fork with the spoon

Explanation:

You should hear a ringing in your ears, from the fork. Once the spoon hits the fork, sound waves travel through the fork up the string and into your ears.

Expand:

To expand this activity, try tying different objects to the string to see what, if any, sounds they make.

Place the strings further and closer to your ears to see what affect distance has on the ringing intensity.

Use different kinds of string to see if this affects the conduction of sound.

<http://www.kids-science-experiments.com/ringinggears.html>

New Learning Kit!

Introducing “**Conserving Our Environment**”.

This kit combines the principles of the “Waste and Our World” binder with information and activities regarding renewable energy sources.

“Conserving our Environment” kit can help reiterate the 3Rs: Reduce, Reuse and Recycle. It can also help explain how light intensity affects solar cells with a solar car race. Or describe the properties of wind

power by building a windmill.

This kit is perfectly integrated for use in the grade 4 science curriculum (Waste and Our World—Unit A), but can also be modified for Science 30 (Energy and the Environment). In the grade 9 electricity unit, this kit would perfectly describe sources of electricity as well as responsible energy development.

Also available with the “Conserving Our Environment” kit is the “Power House”. This

interactive model house explains concepts of sustainable living through the story of people living on a remote island. With 20 energy devices and countless other activities, the “Power House” is an exciting addition to any class. The “Power House” is not included in the “Conserving Our Environment” kit, and is ordered separately.

Any lessons focusing on the environment and conservation would definitely benefit from the activities and resources found in this kit.

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**

P. 403-527-5365

F. 403-528-6570

E. praxis@praxismh.ca

www.praxismh.ca

Founding Member of:



Don't forget you can always get an extra copy of the newsletter off our website, or we can email you the newsletter directly