



The Science & Technology Hotline

Welcome Back!

September 2006
Newsletter

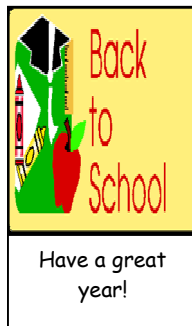
Teachers

In this edition of our newsletter we would like to welcome back all of the hard working and dedicated educators in our community.

Hopefully you had a chance to get away, spend time with family and friends or just rest and relax throughout the summer months.

As the new school year approaches, we just want to remind you that Praxis is here to help you with all of

your science needs. Whether it is borrowing one of our useful hands on Learning Kits, booking a classroom speaker, ask a question, booking a fieldtrip or assistance with the Science Curriculum, we are here to help. We are just a call or e-mail away. Do not hesitate to contact us for all of your science needs.



Too busy to call? New this year, we have online booking forms. Just visit us at www.praxismh.ca.

Praxis Staff

A welcome back to Patty Rooks as well. She has returned from a one year maternity leave and is eager to talk to all of the teachers and educators she has made contact with over the years as well as establishing a positive working relationship with new educators.

Give Patty or Darcee a call @ (403) 527-5365 or e-mail us at praxis@praxismh.ca.

Help Needed!

I am sure that many of you are familiar with the South-eastern Alberta Regional Science Fair. The Science Fair has been a community tradition for over 30 years. Each year we see the most enthusiastic students for all over southeastern Alberta. It is always a pleasure to talk to the students about what they have done. Each and every student is a winner, even if they do not go home with a trophy. All of the students have learned a valuable lesson in something that

is of interest to them. Many of our top Science Fair winners have also gone on to promising careers such as Doctors, Lawyers, Medical Researchers, and Computer Programmers to name just a few. Despite the fact that the Fair has been going on for many years, right now is facing some difficult times. Currently there are only two members on the Committee as many have resigned their positions this spring after MANY MANY years of volunteering their time. At the

present time, the Science Fair is truly in jeopardy of not continuing on. This is a call for help from those that might be interested. The Committee meets on the last Monday of every month at 4:15 p.m. for about 30 minutes in the Catholic Board of Education main Board Office. Please call (403) 527-5365 for more information, to have your name added to the list or please just join us on **Monday, September 25** at 4:15 p.m.. Everyone is welcome.

Useful Information:

☺ **SciQ—Science Revealed.** SciQ is a collaborative partnership project that fosters science learning for K-12 students in Alberta and Canada. Since its inception in 2001, SciQ has focused on combining engaging science-related content with innovative technology to provide learning resources for students, teachers and parents. They have pod casts and web casts to schools throughout the province of Alberta. Visit their website @ www.sciq.ca for more information.

☺ **Science & Technology Week** is coming in October. Mark your calendars for October 6—15, 2006. There will be free week long activities including the annual Family Science Olympics. Watch for more information in the next newsletter.

Exploding Fountain of Soda Pop

There has been so much excitement about this experiment since it aired on the local radio station in June. This experiment is sure to catch everyone's attention when you do it. It is fun to do this experiment, but lets also learn some science about why this happens.

Materials

- 2 L Container of Diet Pop (preferably Cola)
- 1 roll of peppermint Mentos candy
- paper
- tape
- Materials to clean up with.

Procedure

1. If at all possible, do this experiment outside, if that is not possible, cover an area with a sheet of plastic or a tarp.
2. Make a paper tube big enough to

hold the entire roll of Mentos and tape closed.

3. Unwrap the Mentos.
4. Place the Mentos in the paper roll.
5. Place the bottle of Pop on a flat surface.
6. Carefully unscrew the lid and set it aside.
7. Pick up your paper roll of Mentos—holding your hand over one end so they do not fall out.
8. Position the paper tube over the mouth of pop bottle.
9. Remove your hand and drop the



Watch as the fountain of pop explodes out of the bottle.

candies in the pop.

10. GET OUT OF THE WAY!

Explanation

When the Mentos combined with the soda, you should have had an incredible eruption. As you drop the Mentos into the soda, the gum Arabic and gelatin begin to dissolve in the soda. As the soda breaks down this coating, the surface tension of the soda is broke down. As well, the Mentos have tiny holes in their surface (tinier than we can see) called nucleation sites. These sites are a good place for carbon dioxide bubbles (from the soda) to take place and form. Once the Mentos are dropped into the soda, carbon dioxide bubbles begin to form on the surface of the candy. As the carbon dioxide bubbles begin to pop, the carbon dioxide gas is released, pushing all of the pop out of the bottle into a fantastic fountain.

Exploding Grain Elevator (Demonstration Only)

Many of the rural schools will appreciate this experiment—especially with harvest season here.

Materials

candle or tea light candle

candle holder (tart tin works well)

large coffee can with plastic lid

1 metre of rubber hose with a diameter of 1 centimetre

plastic cup

1/4 cup flour

drill

drill bits

Procedure

1. Drill a hole in the side of the coffee can at the bottom (just above the bottom lip). This hole should be big enough for the hose to easily slide through, but not too big that there is any area exposed once the hose is inserted into the can.
2. Insert the rubber hose into the hole. Pull approximately 20 centimetres of the hose into the can.
3. Place the candle in the can.
4. Place the flour into the cup and place into the coffee can.
5. Place the rubber hose into the cup of flour.

6. Working quickly, light the candle.

7. Place the lid on the coffee can.

8. Standing back, blow through the hose.

9. KABOOM!!! The lid should have exploded off of the can.

What is Going On?

When you blow into the can, the dust spread throughout. The candle then ignited the mixture causing gases in the air to expand. When the gases expanded, they needed more space than the inside of the can had. There was only one place for the gases to go—out of the can. This is why it exploded! This can happen in a grain elevator if the elevator is not properly ventilated. The dust builds up and has no place to go.

For all of your science questions or needs, contact Praxis :

p: (403) 527-5365

f: (403) 528-6570

e: praxis@praxismh.ca

w: www.praxismh.ca

Founding Member of:

