



Important Information

Can groundhogs accurately predict the weather on February 27?

Over a sixty year period, groundhogs have accurately predicted the weather (when spring will start) only 28% of the time. Groundhog day was first started in Germany where farmers would watch for a badger to emerge from winter hibernation. It was believed that if it was sunny, the sleepy badger would see his shadow and become frightened. The badger would then duck back into their hole for a six week nap. If the day was cloudy, the badger would stay out, knowing that spring was coming. When German farmers emigrated to Pennsylvania, they brought this celebration with them. When they couldn't find any badgers, they substituted groundhogs.

Source: [The Handy Science Answer Book](#)

Southeastern Alberta Teacher's Convention

The Southeastern Alberta Teacher's Convention will be **February 18 and 19** at Medicine Hat College. Praxis will have a booth set up there. Please stop by to pick up one of our new resource guides, see our hands on learning materials, gather some important information or ask some questions. I hope to see everyone there!

Science Fair

It isn't too late to get a project ready for the Southeastern Alberta Regional Science Fair. If your students need help with their project, information on how to put together a winning project or any assistance whatsoever,

give Praxis a call and ask for their assistance. Praxis can set you up with mentors who are experts in their fields. The volunteers love being able to assist the students with their projects. If you need judges for your school science fair or would like to judge a science fair, give Praxis a call.



The Kiwanis Southeastern Alberta Regional Science fair is scheduled for **March 27, 2010**. Registration is available online but closes on **March 20, 2010**. Visit <https://secure.yzf-fsj.ca/sfiab/kiwanissoutheastalberta/> to register!

Praxis is available to assist with your schools local science fair. Whether you need help organizing the fair, finding judges, or just have questions regarding science fair in general - we're here to help! Contact us at praxis@praxismh.ca or give us a call at (403) 527-5365.

The Face of MHC Contest

This is an exciting opportunity for new and returning students to Medicine Hat College. Students are asked to send MHC a short video expressing why they should be the *Face of MHC*. The Contributor of the winning video will win:

- **MHC Tuition for one year**
- **On campus residence for one year**
- **Laptop**
- **Video camera**
- **MHC Merchandise**

This prize package is valued at approximately \$15,000 CDN.

Throughout the year, the *Face of MHC* will work with College Advancement Staff during the 2010-2011 school year to enhance communications with students on campus as well as individuals considering attending MHC. By documenting their College experience through blog writing, and self produced videos posted to the College website, others will be able to get a glimpse

into what it is really like to be a college students—straight from the source. The *Face of MHC* will bring a strong student perspective to MHC promotions, providing prospective students with information they cannot get from traditional advertising.

Contest entry deadline is **March 5, 2010**.

Please visit www.mhc.ab.ca/facofMHC for more information.

STATIC ELECTRICITY

The science behind the principle of static electricity is a bit more complicated than one might expect.

All matter has atoms. The atoms of matter are made up of small particles called electrons, protons and neutrons. Protons have a positive charge. Neutrons do not have a charge and are confined to the centre of the atom. Electrons have a negative charge, and have the ability to move from one atom to another. There are an equal number of electrons and protons in each atom which results in a neutrally charged atom.

Static electricity is created when two objects come into contact with one another and are then separated. When in contact, the surface electrical charges of the objects try to balance one another. This happens by the free flow of electrons from one object to the other. When the objects are separated, they are left with either an excess or a shortage of electrons. This causes both objects to become electrically charged thus creating static electricity.

Sources: **Science is ...** by Susan V. Bosak and **Health and Safety Guidelines for Your Workplace** by the Industrial Accident Prevention Association.

Magic Pepper?

This experiment will really catch the student's interest.

Materials

Plastic petri dish
Piece of wool cloth
Pepper
Paper
Scissors

Procedure

1. Place a small pinch of pepper into the petri dish.
2. Place the cover on the petri dish and shake it up well so that the pepper is spread out evenly over the bottom of the dish.
3. With the piece of paper, cut out a shape or a stencil.
4. Hold the cut out shape on top of the petri dish.
5. Rub only the open area

of the petri dish with the wool cloth.

6. Remove the stencil and turn the dish upside down.
7. Turn the dish right side up. What do you see?

Explanation

Only certain areas of the lid of the petri dish became charged when it was rubbed with the piece of wool because of the stencil. Because the pepper is uncharged, it was attracted to the charged areas on the lid thus sticking to them. The pepper particles were attracted because they are electrical insulators and also because of their irregular shape. These two factors make it very difficult for the electrical charges to transfer themselves from the plastic to the pepper.

When the plastic was rubbed with the wool, negative static electricity was created, which created a positive charge on the top of the pepper particles.

This principle is applied in many workplaces such as photocopying and industrial painting.



Try many different stencils to see which one looks the best!

How can you separate salt from pepper?

Materials

Salt
Pepper
Petri dish
Wool cloth
Plastic ruler
Piece of white paper

Before you begin

1. Ask the students how to separate these two from each other.
2. Try some of the methods that the students suggest.

Procedure

1. Place a pinch of salt and pepper into the

petri dish and mix the two well.

2. With the wool cloth, rub the top of the petri dish.
3. Turn the petri dish over and then right side up. (The pepper should have stuck to the lid).

OR

1. Place a mixture of the salt and pepper onto the sheet of white paper.
2. Take the ruler

and rub it with the wool cloth.

3. Hold the plastic ruler over the mixture.
4. You will see the pepper become attracted to the ruler.

Explanation

The plastic surfaces became charged when you rubbed them with the wool cloth. The pepper was uncharged and was attracted to the charged surfaces of the plastic.



Static Electricity

For all your science needs contact
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