

# NEWSLETTER

## Animal Fun Facts

- Like many nocturnal animals, owls can't move their eyes in their sockets, instead they can rotate their heads 270° to help them see around them.
- Inbreeding causes 30% of Dalmatians to suffer from hearing disabilities.
- The male fox mates for life, if its female partner dies it will be single for the rest of its life, but if a male dies the female will find a new mate.
- Birds do not sleep in their nests, they nap in them sometimes but sleep somewhere else.
- There are some species of frogs that can be frozen solid, and then thawed and continue living.
- It takes 12 bees their entire lifetime to make a single tablespoon of honey.
- Because they have transparent fur polar bears cannot be detected by infrared cameras.
- A 20 inch jack rabbit can leap 20 feet in a single bound
- If a starfish was cut up each piece would grow into a new starfish
- A giraffe and a human have the same number of bones in their neck 7.

## OPPORTUNITIES

### Heritage Youth Researcher Summer Program

HYRS is a six week summer research program offered through the Alberta Heritage Foundation for Medical Research for grade 11 students, at U of A and U of C. During the six weeks the students will be matched up with researchers and work in their labs with them on their research, chances are it could be leading edge research. Not only will students work as part of the research team they will also be involved in a variety of activities to enhance their research experience. Students need an 85% standing in grade 11 math and science. Students also need to include an essay with their application showing an interest in biomedical and health research. Students also need 3 references, 2 from teachers and 1 from someone in the community. A commitment to give a presentation after the summer at the student school about their experience is also



needed. Students will get paid for their participation in the 6 week program. Deadline to apply this year is April 3.

### International Year of Astronomy

2009 is the International Year of Astronomy, we would like to encourage everyone to make a trip out to the Sunridge Observatory sometime this year to participate. The Medicine Hat Astronomy Club has open houses at the Observatory every month that are open for everyone to attend. The next open house will be on Saturday March 14.

## CALL FOR INSTRUCTORS

Medicine Hat College is looking for people to help instruct their summer camps this summer. There are lots of camps, including the Praxis Science Camps that need instructors still. The Praxis summer camps that still need instructors are: Digging for

Dinosaurs, Gross Out Science, Blast off, and Scientwists. All our Praxis camps come with lots of materials and lesson plans for the instructor to use. Camps run for one week each twice over the summer. This would be a great opportunity for new graduates going into

## REMINDERS

### Science Fair

The Kiwanis Regional Science Fair is on Saturday March 21 at the Medicine Hat College, judging starts at 9:00. Please come and check it out, we will have some great displays and hands on activities to try out in addition to checking out the students work.

### APEGGA Teacher Awards

Nominations are now being accepted, deadline is March 31, 2009. Nominate a teacher you know that makes science fun for their class. They can win money for their school to put towards resources. Nominations can be made by fellow teachers, students, or parents.

### Learning Kits

We still have some learning kits available for the rest of the year. If you would like to book one please call our office at 403-527-5365 and we can help you out.

an education related program, teachers or teachers assistants looking for some extra cash over the summer. For more information please contact Praxis at our office 403-527-5365.

## WARM UP

### Materials

- box of Plaster of Paris (no substitutions)
- plastic spoon
- water
- paper cup

### Procedure

1. Measure out 4 or 5 tablespoons of Plaster of Paris into the paper cup.
2. Hold the paper cup in your hand and feel the temperature.
3. Add 3 to 4 tablespoons of water, and stir the contents of the cup.
4. Hold the cup in your hand and feel what is happening. It might take a few minutes.

### Explanation

The first time you felt the cup, you probably did not feel anything. This is because there wasn't anything happening in the cup. When you added the water a chemical reaction began to happen. Right after you added the water to the Plaster of Paris, the mixture became cool and thick. As the mixture began to harden, an exothermic reaction began to take place. Heat energy began to be given off.

Plaster of Paris is made when gypsum crystals are ground into a powder. When you add water to the fine powder, it changes back into its original crystal form and in the process, gives off heat.



Feel the temperature rise in this experiment.

*With the way the temperature is changing outside I thought that a couple of experiments dealing with warmer and cold would be appropriate.*

## COOL DOWN

### Materials

- tap water
- 2 Alka-Seltzer tablets
- clear glass
- thermometer
- stop watch/timer
- paper
- pen/pencil

### Procedure

1. Fill the glass 3/4 full of water.
2. Place the thermometer in the water and record the initial temperature.
3. Make a chart and record

the temperature of the water in the chart.

4. Check and record the temperature every minute for five minutes.
5. Add the Alka-Seltzer tablets to the water.
6. Once the tablets have stopped fizzing, take the temperature again.
7. Record your final temperature in your chart.
8. Compare your readings from before and after you added the Alka-Seltzer tablets to the water.

### Explanation

The final temperature of the water should have been lower (colder) than the initial temperature you recorded. This is because when you added the Alka-Seltzer tablets to the water, an endothermic reaction took place. An endothermic reaction is a reaction that absorbs energy. When energy is absorbed, the result is a temperature change. In this case, the final temperature should be lower than your initial temperature.



For all of your science needs contact Praxis  
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 W: [www.praxismh.ca](http://www.praxismh.ca)

### **Please note:**

We were having a problem with our online booking form the last month or so, as some of you may know, if you tried to request a kit. We have now fixed the problem, and our online booking form is working properly now. If you are still having problems booking a kit please email or call us and let us know.

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