

# October Newsletter



## Science & Technology Week

It is that time once again— Science & Technology Week in Alberta. Officially, it runs October 13-20, 2006. Throughout this week, Praxis will be hosting a number of fun and exciting events— please be sure to take one or all of them in. We look forward to seeing you there!

### Science & Technology Week

**October 13-20, 2006**

#### Saturday, October 14, 2005

Family Science Olympics  
Medicine Hat High School  
10:00 a.m.—3:00 p.m.

All families must have one adult over the age of 18 in order to participate. Everyone welcome.

Lots of Prizes!

FREE

#### Monday, October 16, 2006

Science Fair Know How  
Medicine Hat Public Library

7:00 p.m.—8:30 p.m.

Open to students aged 10—18.

Pre-registration is required.  
Call 502-8526.

All students must be accompanied by one adult.

FREE

#### Wednesday, October 18, 2006

Small Science—Discover Your World

Medicine Hat Public Library  
1:30 p.m.—2:30 p.m.

Open To Children Ages 4—6

Pre-registration is required.  
Call 502-8526.

All Preschoolers must be accompanied by an adult.

FREE

#### Science Reporter 06/07

Praxis – The Science & Technology Hotline and the Medicine Hat NEWS are proud to

be able to present a brand new contest for the 2006/2007 school year. All Junior and Senior High Students in Medicine Hat and surrounding area are invited to try their hand at being a Science Reporter for a day.

Student submissions can be in the form of a written essay, report or a podcast. Let's get creative! The submission should be done to inform, explain, teach or express an opinion about an issue in the field of science and technology. When researching and writing your submission, think about the impact it may have on society, the environment or even yourself. If possible, your submission should also emphasize your topic's importance or connection to Canada, Alberta, and south-eastern Alberta in particular. Suggestions for topics and rules can be viewed on the Praxis website:

[www.praxismh.ca](http://www.praxismh.ca)



*Send your submissions today!*

## Classroom Presentations

### Inside Education Presentations

Mark your calendars...the week of November 20—November 24 is when Inside Education will be coming to our area.

Inside Education™ is a non-profit charitable society providing education programming to Alberta teachers and students, community groups and the public who want to learn more about the issues related to environmental sustainability and the development and use of our natural resources.

Throughout this week, Inside Education will be giving a number of FREE presentations to classes in Medicine Hat and the surrounding area. They will be doing the following curriculum linked presentations:

Grade 4: Waste in Our World

Grade 4: Natural Resources

Grade 6: Trees and Forests

Grade 7: Interactions and Ecosystems

The presentations run for about 75 minutes and are to be interactive and engaging

for students and teachers alike. Even if you are not currently doing these units, I would recommend you try to book a time for your class. Bookings have started and they are filling up fast. If there is enough interest, Praxis will consider booking Inside Education to come back again in the new year.

To book your class, call Praxis @ (403) 527-5365 or e-mail [praxis@praxismh.ca](mailto:praxis@praxismh.ca). Please have the name of your school, size of your class, time preferred for the presentation, a contact name and number (or e-mail) all ready in order to complete your booking.

# Vampire Soap

## Materials

1 bar of Ivory Soap  
Rubbing alcohol  
Measuring spoon  
Bowl  
Spoon  
Small jar with a tight fitting lid  
Laxative Pills containing phenolphthalein (Correctol, Colace, Dialose Ex-Lax)

Note: Only an adult should demonstrate this experiment.

## Procedure

1. Take two laxative pills and place



Blood red hands will scare your students!

- them in a bowl.
2. With the back of a spoon crush the laxative pills up.
  3. Pour the crushed pills into the jar.
  4. Measure out two tablespoons of rubbing alcohol and pour into the jar.

5. Shake up very well.
6. Dip your hands on the laxative mixture, shake off and allow to dry.
7. Wash your hands with the bar of soap.
8. Watch what happens!

## Explanation

The soapy water should have turned bright red. This occurs because of a chemical reaction. The laxative pills contain phenolphthalein. Soap is essentially made by mixing together fats and lye or alkali. When phenolphthalein reacts with alkali (soap) and turns bright red.

# Quicksand

## Materials

$\frac{1}{4}$  cup cornstarch  
clear plastic cup  
 $\frac{1}{4}$  cup tap water  
spoon

## Procedure

1. Place the cornstarch in the cup.
2. Add the water to the cup.
3. Stir the mixture with the spoon.
4. Working with a partner, pour a little bit of the mixture into your hand. It will be very runny.
5. With your finger, touch the liquid.

Observe what happens.

## Results

When you touch the cornstarch mixture, it instantly turns to a solid. Once you remove your finger, the mixture turns back to a liquid.

## What is going on?

Matter takes the form of solid, liquid or gas. However, solids, liquids and gases can be mixed together in interesting ways. When one substance dissolves or disappears completely into another, the result is called a solution. The cornstarch and water mixture is not a solution,

however. It is a slightly different mixture called a colloid. A colloid is a mixture of tiny particles of one substance scattered evenly throughout another. In this case, the cornstarch particles are scattered evenly throughout the water.

*Can you escape from the quicksand?*

Colloids can change form under pressure. In this activity, when the mixture is in the cup, it appears to be a liquid. But when your partner touches the solution, the

touch puts pressure on the mixture. The pressure forces the cornstarch particles together and the mixture becomes solid. When pressure is released, the mixture returns to its original liquid form.

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

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