



Newsletter

Science and Technology Hotline

May 2008

Learning Opportunities

Professional Development

Inside Education is offering professional development opportunities for teachers free of charge (they even cover your substitute teacher if required). One of the opportunities is in Medicine Hat. Grasslands Institute will be offered in Medicine Hat July 8–11. A Boreal Institute will also be offered this summer in Lac La Biche July 12–15.

An Inconvenient Truth

Sue Higgins an instructor at Medicine Hat College has recently been to Montreal to be trained to

give the Al Gore presentation “An Inconvenient Truth”, about global warming and its effects. The movie won an academy award and now you can bring it into your classroom live, and students can ask questions.

Telescope

Sunridge Observatory has the big telescope fully functioning again and they would love to have classes come out and study the stars as part of their curriculum. They also have a new telescope for use.

Archaeological Society of Alberta

2008 Annual Conference

will be held in Medicine Hat, May 2–4 at the college. There will be speakers from 9 until 3 on Saturday May 3rd, and a field trip on Sunday.

Redi Recycling Tour

Redi Recycling is willing to offer tours of the recycling plant to classes. Grade for the Grade 4 Waste and Our World Topic, and others.

Exploring Wetlands

The Police Point Nature Center is offering field trips to explore the wetlands in and around Medicine Hat.

For information on any of these opportunities contact Praxis

Praxis AGM

The Praxis Annual General Meeting will be held on Wednesday May 21 at 7:00p.m. at Medicine Hat High School in Room 704.

For more information, or if you would like to attend call Erin at 527-5365

Praxis Resources:

- Praxis still has a number of hands on learning kits and resources available for use in May and June. Why not get something fun the kids to do these last few months of school and get them learning about Science at the same time. A full list of kits and resources is available on the Praxis website at www.praxismh.ca.
- Why not look into a field trip or a guest speaker we can help you to arrange it, just call our office
- For neat simple experiments check out the Praxis Science Smarts column every Saturday through out the school year in the Medicine Hat News Youth Section.

Helpful Websites

- www.wlearning.ca a website made based on the elementary Alberta curriculum. Links to interactive websites to help enrich students learning.
- www.on.ec.gc.ca/skywatchers website from the government of Canada all about the weather. Interactive pages and a page to enter your weather into.
- www.freesciencelectures.com lots of free educational science videos to help in your classroom.
- <http://hyperphysics.phy-astr.gsu.edu/hbase/hph.html> dedicated to physics
- www.ivanhoe.com/science/ a great site to keep up with the latest developments in science and technology



High Bouncing Balls

Materials:

- Soccer or Basket ball
- Tennis ball
- Masking tape
- Flat hard surface outside

Procedure:

1. Hold both balls out at shoulder height and drop them to the ground, watch how high they bounce back up.
2. Use the tape to make a "collar" of sorts on the bigger ball, something

that will support the smaller ball on top of it.

3. Now place the tennis ball in the collar and hold the bigger ball out at the same height as before.
4. Drop the balls and watch what happens this time.

Explanation:

When you dropped the balls separately they should have both bounced back up to about the same height. When you put the smaller ball on top of the bigger one and dropped them like that the tennis ball should have bounced really high.

When you dropped the balls separately

they went through energy changes, from potential energy when you were holding them up, to energy of motion as they fell, to compressed mechanical energy at the moment that they hit the ground and compressed, then back into energy of motion as they bounced back up again.



How high will the balls bounce?

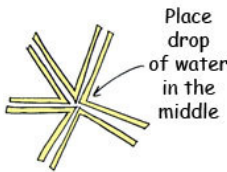
When you dropped the balls together with the tennis ball on top the same energy changes happen. Then the basketball bumps into the tennis ball as they start to bounce up again, and some of the basketball's energy of motion is transferred to the tennis ball. The basketball loses energy so it doesn't bounce as high, and the tennis ball gains energy causing it to bounce really high.

Try these experiments as demonstrations in your classroom!

Moving Matches

Materials:

- Wooden Matches
- Water
- Eye dropper
- Plate



Explanation:

The matches are made of dried wood, with very little water left between the cells. The water gets sucked into the matchsticks when you dropped in onto the plate. This capillary action caused the matchsticks to try and push out to their original shape, which had been altered when you bent the sticks in half. This is caused by turgor pressure.

Source: <http://www.csiro.au/resources/ps1vc.html>

Procedure:

1. Bend 5 matches in the middle (don't break them all the way through)
2. Arrange the matches so that their bends are all touching in the middle, they should form an asterisk shape.
3. Put 3 or 4 drops of water in the middle of the matches with the eye dropper.
4. Watch what happens after a few minutes



For all of your science needs contact Praxis

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