



# Newsletter

April 2009

## Classroom Help

There are lots of great opportunities to take your class outdoors to learn about science in the spring, so with the nice weather here why not take advantage of all that is out there. Here we look at just a couple of them for you.

### Police Point Interpretive Center

They have curriculum based programs for all

elementary grades, some in the park and some that they can bring into your classroom.

### Cypress Hills Interprovincial Park

There are lots of different programs that they offer for all grade levels including Biology 20. They also offer Nat Packs that are backpacks filled with materials for a teacher guided lesson if



you can't make it out to the park with your class.

For more information about either of these great local opportunities please contact Praxis at 403-527-5365

## High School Student Opportunity

Deep River Science Academy is a great summer program for students who love biology, chemistry, or physics.

This 6 week program allows students the chance to work in a top lab. Students need to have a minimum grade 10 science course with a

mark of 75%. Financial assistance is available. For more information about this great opportunity for students contact Praxis.

## Websites

With all the focus on the environment lately and needing to reduce our carbon footprints, we have a couple of websites with lots of helpful information on them for you.



### Planet Watch

Lots of information make this website great. And you can sign up for updates every couple of weeks where they highlight new article to keep you up to date.

[www.planetwatch.org](http://www.planetwatch.org)

### Climate Change

This site is a great resource for teacher with lots of useful ideas about how we can all help to reduce our carbon footprint.

[www.climatechange.gc.ca](http://www.climatechange.gc.ca)

## Kiwanis Regional Science Fair

- ◆ This years regional fair went over very well on Saturday March 21 at the Medicine Hat College, there were 159 students with 102 projects from all over the city.
- ◆ We are currently selecting who will be representing Medicine Hat at the Canada Wide Science Fair in Winnipeg May 9-16 from 10 applicants.

## Scientist Focus

### Gregor Mendel (1822—1884)

- ◆ Often called the father of genetics for his work with pea plants
- ◆ Through his work he showed that the inheritance of certain traits in pea plants followed particular laws
- ◆ The significance of his work wasn't realized until years after his death - this led to the foundations of genetics as we know them today.

## How are clouds made?

Only two things are needed for clouds to form: tiny particles such as dust, soot or pollen, and warm, moist air that is cooled.

### Materials

- 2 litre clear plastic pop bottle with a screw on cap
- Warm water
- Matches
- Ziploc baggies

### Procedure

1. Fill the bottom of a plastic pop bottle with 1 to 2 centimetres of warm water.
2. Lay the bottle on its side. Light a match and after it burns for a couple of seconds, blow it out.
3. Hold the match in the opening of the bottle so that smoke

drifts into the bottle. You can help suck the smoke in by pushing down on the bottle and releasing the bottle. This action will suck the smoke in.

4. Screw the cap on the bottle. Swish the water around to rinse down all parts of the bottle.
5. Hold the bottle up toward a bright window or a lamp. Squeeze the bottle for a moment and then let it go. What do you see inside the bottle? Faint “fog” should be visible.

### Questions

1. How is the cloud in your bottle like a cloud in the sky?
2. Does “fog” form each time you squeeze and release the bottle? Why?

### Extension

Blow up two plastic bags and zip them shut. Each bag is filled with warm, moist air from your breath. Put one bag into the freezer and leave the other bag at room temperature. After 15 minutes, take the bag out of the freezer. Compare the two bags. Which bag has condensed water vapour inside? Why? Leave both bags at room temperature for half an hour.

1. What happens to the condensed water vapour?
2. How does the temperature of air affect the formation of clouds?

### Did you know?

Did you know that you make clouds on cold days without even knowing it? When you breathe out warm, moist air, it cools in front of you and briefly forms a little “cloud”.

## Make Some Wind

Have you ever wondered what makes the wind? This simple experiment will show you all about wind.

### Materials

- Lamp without its shade
- Talcum powder or chalk dust

### Procedure

1. Turn the lamp on.
2. Let the bulb get quite hot. Do not touch the bulb as you will burn yourself. Hold your hand a

few centimeters away so you can feel the heat.

3. When the bulb is hot, sprinkle a little bit of talcum powder or chalk dust just above the bulb.
4. Observe what happens.

### Explanation

The powder is carried upwards by a rising current of air that has been warmed by the light, wind. Real wind starts when the sun heats the earth. As the earth gets warm, it heats the air just above it. This hot

air expands, making it lighter. The warm, light air rises, leaving room for heavier, cooler air to move in and take place.

This movement is what we call wind.



*Here are a couple of experiments that you can show your students to demonstrate weather.*

**For all of your science needs  
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