



March 2010

## APEGGA Teacher Awards (Medicine Hat)

Teachers who make math or science fun, help to encourage and inspire students to succeed academically. At various points in our lives we encounter remarkable teachers. They "make school cool!" The APEGGA Teacher Awards Program recognizes these exceptional teachers for their enthusiasm and dedication. Students, parents, principals, school staff, and teacher colleagues can submit nominations for the **20<sup>NEW</sup>** APEGGA Teacher Awards presented throughout the province, annually. At a school event, each award recipient is presented with a certificate and \$2,000 to be used at their discretion for professional development, school equipment, resource materials, website development, teaching aids, or other tools to improve teaching and student learning. The process is simple. Use the nomination form, send a letter, or complete your nomination on

our website: [http://apegga.formbin.com/forms/teacher\\_award\\_nominations](http://apegga.formbin.com/forms/teacher_award_nominations)  
You must include:

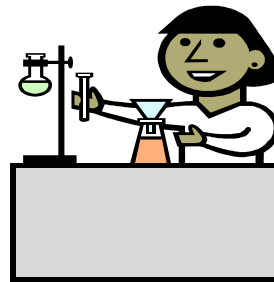
- The teacher's first and last name.
- Subject and grade taught
- School name and address, including city or town and postal code.
- The principal's first and last name.
- An explanation of why the teacher deserves this award.
- Your name and telephone number.

Judges are looking for a variety of nominators. Ask students, parents, other teachers and principals to support your nomination and include their letters with yours. Send in your nomination information before March 31, 2010. APEGGA is collecting this information for use in promoting this event and

may make it public by means of oral, printed or electronic publication.

Judging criteria includes: variety of nominations (students, parents, teachers, administrators, etc.); inspiration to students; extra-curricular activities of teacher; teacher qualities. APEGGA volunteer judges, in ten provincial areas, will help to select award recipients.

Award recipients will be chosen by the end of April.



### Did you know?

- The highest waterfall in the world is the Angel Falls in Venezuela. At a towering height of 979m did you know that each drop of water takes 14 seconds to fall from the top to the bottom.
- There are 60,000 miles of blood vessels in the human body.
- The coldest temperature on Earth was recorded at Vostok, on the Antarctic ice sheet. On July 21, 1983, the temperature there dropped to  $-128^{\circ}\text{F}$  ( $-89^{\circ}\text{C}$ ). This Area also has the coldest recorded average temperature of  $-72^{\circ}\text{F}$  ( $-58^{\circ}\text{C}$ ).
- The whale shark has over 4,000 teeth. Each tooth is only 3mm long.
- The average person will shed 40 pounds of skin in his/her lifetime.
- In 1900, the temperature in a town in Montana rose  $30^{\circ}\text{F}$  ( $17^{\circ}\text{C}$ ) in less than three minutes. The cause? A chinook.
- A sneeze can exceed the speed of 100mph.
- A cow gives nearly 200,000 glasses of milk in her lifetime.
- Jupiter is larger than 1,000 Earths.
- The air located around a lightning bolt is heated to around 30,000 degrees Celsius. This is 5 times hotter than the surface of the sun.
- The oldest living tree and hence one of the oldest known living things on Earth is a bristlecone pine tree located in California, North America, it's actually over 4600 years old!

## Sky Science Resource

I am sure that there are many teachers out there that are not familiar with a hidden treasure in our area. This treasure is the Medicine Hat Astronomy Club and the Sunridge Observatory located just outside of Medicine Hat. Praxis works very closely with the Club and grade six teachers in Medicine Hat in order to enhance the Sky Science Unit for our grade six students. We are proud to have their members serve as our Scientist in the Classroom as well as provide tours of their facility.

Medicine Hat Astronomy Club is holding the AGM and social on Saturday, March 20, 2010. It is promised to be a great evening that the entire family can enjoy.

The evening will be a busy one with a speaker from the Saskatchewan Astronomy Club. He will present planetary information and I am sure there will be some great classroom tools all grade six teachers can utilize in their Sky Science Unit! There will also be supper, games, a silent auction, club information and assistance with those of us that are not really



sure how to use our telescopes! If you would like further information and to purchase tickets, please contact the Club President, Thor Jacobson at [thorj@shaw.ca](mailto:thorj@shaw.ca).

For those of you that need some hands on resources for your Sky Science Unit, do not forget about our Hands on Learning Kit at Praxis. This is a great resource for your classroom. When you sign the kit out, be sure to book your visit to the Observatory as well! Call praxis at (403) 527-5365 or e-mail [praxis@praxismh.ca](mailto:praxis@praxismh.ca). We are looking forward to helping you out in the classroom!

## MAKING CLOUDS

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

Make your own clouds!

### MATERIALS

2 litre clear plastic pop bottle with a screw on cap  
Warm water  
Matches  
Optional: twist ties, plastic bags

### 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 twist tie the bags 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.

1. Which bag condensed water vapour inside?
2. 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".

**Source: Science Is... by Susan V. Bosak**



## Where Does The Wind Come From

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

### Materials

Lamp  
Talcum powder or chalk dust

### Procedure

1. If the lamp has a shade, remove it.
2. Turn the lamp on.
3. Let the bulb get quite hot.

4. **Caution:** Do not touch the bulb as you will burn yourself. Hold your hand a few centimetres away so you can feel the heat.
5. When the bulb is hot, sprinkle a **small** bit of talcum powder or chalk dust just above the bulb.
6. Observe what happens.

### What is going on?

The powder is carried upwards by a rising current of warm air, or wind, warmed by the light bulb. 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.



This is a familiar sight in Southern Alberta!

**Source: The Jumbo Book of Science** by the Ontario Science Centre.

For all your science needs contact  
**Praxis**

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F: 403-528-6570  
E: praxis@praxismh.ca  
W: www.praxismh.ca

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