



November 2007 Newsletter

Learning Opportunities

APPEGAA Science Olympics

The Medicine Hat branch of APEGGA – the Association of Professional Engineers, Geologists and Geophysicist of Alberta, wants to help you with your science curriculum, while providing some fun and practical activities for the students to learn and appreciate science. APEGGA is willing to send 2 or 3 professionals into your classroom with a Science Olympic activity/



event or two for your students to complete and compete in. They will try to find an activity that fits in with the unit that you are currently studying in your classroom. They will provide the materials needed for the activity and prizes for the winners. For more information and to book this great learning opportunity for your students contact Praxis. The sooner the better as the volunteers time can be limited!!

Tomatosphere

Due to huge numbers of classes participating in this project last year it will continue on again. If you have previously par-



icipated you will automatically be sent seeds again. If you haven't participated before that's okay you can still register. Registrations are being accepted now, seeds will be sent out in the spring. Check out www.tomatosphere.org for more information.

Upcoming Events

Science Fair

The Regional Science Fair is coming up. This year it will be held on Saturday March 1, 2008 at the Medicine Hat College. Yes it is early this year due to the change in venue and Easter. We are in the early planning stages, so keep an eye out for more information coming in the follow-

ing months. And if you want to help plan we could sure use it, contact Praxis to help. There will also be workshops to help your students plan. More info to follow soon.



Operation Minerva

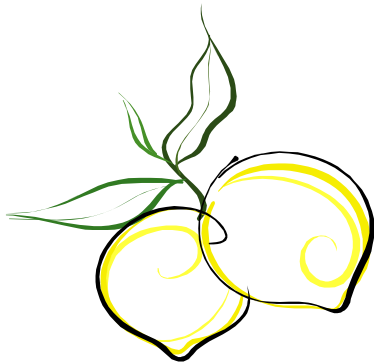
The 16th Annual Operation Minerva conference for grade nine girls will be held at Medicine Hat High School on Wednesday January 30, 2008. Information and registration packages will be sent out next week, schools with grade 9 girls, keep your eyes open for them.

Interesting Animal Facts:

- *The only land animal that cries (other than humans) is the elephant*
- *A cockroach can live for 9 days without its head*
- *A dog's sense of smell is 1,000 times more sensitive than a humans*
- *The African Elephant gestates for 22 months*
- *The short-nose Bandicoot has a gestation period of only 12 days*
- *Young giraffes can grow an inch a month*
- *When a baby giraffe is born it usually falls from a height of 6 feet*
- *The muzzle of a lion is like a finger print, no two lions have the same whisker pattern*
- *Bats always turn left when leaving a cave*
- *Giraffes often only sleep for 20 minutes every 24 hours, and they never lie down*
- *The call of the humpback whale is louder than a Concorde and can be heard for over 500 miles, it is the loudest sound made by a living thing*
- *Koalas sleep an average of 22 hours a day*
- *A shrimps heart is in its head*



Lemons versus Limes



Which one floats?



Materials

- Lemons*
- Limes*
- Deep bowl
- Water

* Try to get lemons and limes that are the same size and weight

Procedure

1. Fill the bowl with water
2. Drop the lemons in. Do they sink or float?
3. Drop in the limes, do they sink or float?
4. Peel the fruit—note the differences in the rind
5. Drop the peeled fruit into the water, now what happens?

Explanation

To be honest there is no definitive explanation for what is happening. You should have seen that the lemon floated both with the peel on and the peel off, whereas the lime should have sank both times. Even though both the lemon and the lime weighed around the same or even the same and were the roughly same size they did different things in the water. One theory has to do with the rind, because the lemon rind is thick and full of air, and the lime rind is very thin, but this doesn't explain why the same thing happens when you peel the fruit. Another theory is the density of the fruits. The lime is slightly more dense than both the lemon and the

water. So that explains why it sinks.

But it's still a little confusing, some people think that it has to do with the lime flesh being more dense and able to better hold its juices.

All in all since the lemon and the lime both have densities very similar to water even small changes in it can make the difference between a floating fruit or a sinking one.

Maybe you can help to figure out why this happens the way that it does!



Floating Eggs

Materials

- Raw eggs
- Water
- Bowl or cup
- Salt (pickling or kosher work best)

Procedure

1. Fill the glass or bowl with regular tap water
2. Put the egg in it, watch what happens.
3. Make a very saturated salt solution by dissolv-

ing 4 rounded table-spoons of salt in 2 cups of water

4. Fill the glass half full with the salt water, and then carefully pour regular tap water down the sides to fill the glass. Try to not let the two solutions mix.
5. Drop the egg into the new mixture, and watch what happens.

Explanation

In the first one the egg should have sunk to the bottom because eggs can't float in regu-

lar tap water. When you put the egg into the second glass it should have sunk through the regular water and then floated once it reached the salt water, this is because salt water is denser than regular tap water.

You could demonstrate this to your students and have the water

and salt water containers ready to go and then show them, they will be amazed at



For all of your science questions and needs contact Praxis

Phone: (403) 527-5365

Fax: (403) 528-6570

E-mail:

praxis@praxismh.ca

Web: www.praxismh.ca

Founding Member of:



Is there anything that we can improve on, please let us know.