The Science & Technology Hotline

PRAXIS

June 2004
Newsletter

Points of Interest When Viewing The Night Sky In June.

- June Solstice will be on June 21 at 00:57UT. This is the time when the Sun reaches the point farthest north of the celestial equator marking the start of summer in the Northern Hemisphere and winter in the Southern Hemisphere.
- June 3 will be the full moon. It is often referred to as the "Rose Moon" in June.
- June 8 the Transit of Venus will take place. This is the first time since 1882 that Venus will cross the face of the Sun as we can see it from Earth. This very rare event will last approximately six hours and should be able to be seen worldwide. The transit begins at 05:13 UT and ends at 11:26 UT. **Warning: Never look at the Sun directly as it will instantly cause damage to your eyes. Safely observe this by using a pinhole in a large card to project the Sun's image onto a white surface. Venus will be a black disk 1/30th as wide as the sun.**

Summer Camps

Praxis and Medicine Hat College are pleased to be offering Summer Science Camps. There are many great opportunities for students of all ages. Participants will be able to learn about the sky above them or delve into the world of crime science investigation as they put on their thinking camps as a CSI investigator and attempt to put together the pieces of the puzzle in the bizarre "crime scenes". Camps are designed for Ages 6—9 and Ages 9+. The same camp will likely run twice over the summer, so if you are away on holidays, hopefully you will be able to catch it the second time it is offered!

Experimenting With Science

Ages 6—9

Monday to Friday, July 5– 9

Monday to Friday, Aug. 16-20

9:00 a.m.—noon

Rockin' Robolab

Ages 9+

Monday to Friday, July 19-23

Monday to Friday, Aug. 16-20

9:00 a.m. to noon

To Infinity...and Beyond

Ages 9+

Monday to Friday, July 19—23

Monday to Friday, Aug. 16-20

1:00 p.m.—4:00 p.m.

Extreme Science Camps

The Race

Ages 9+

Monday to Friday, July 12—16

Monday to Friday, Aug. 9—13

9:00 a.m. to noon

Camp CSI

Ages 9+

Monday to Friday, July 12—16

Monday to Friday, Aug. 9—13

You never know what is going to happen at the Summer Science Camps!

1:00 p.m. to 4:00 p.m.

These camps will involve exciting hands on activities and investigations. You do not want to miss out, so make sure you sign up early. Hopefully, you will have received your calendar with these camps at home, but if you require further information, have questions or would like more in depth descriptions, please call Praxis @ (403) 527-5365 or Medicine Hat College @ (403) 529-3844 to register today!

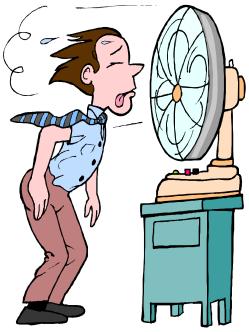
Reminder

I know that the last thing you are thinking about right now is next year. I just wanted to remind you that if you are:

- Doing any planning over the summer and are thinking that it would be really exciting for my students to have a classroom visit from a scientist...
- Would like to book a fieldtrip, but are not sure of where to go...
- Will require one of the many hands on Learning Kits to Supplement the curriculum...
- Teaching something new and would like some curriculum support...
- Interested in Science Fair, but not sure of where to start...

Call Praxis @ (403) 527-5365 early so we can meet your request! Have a great summer!!

Hot Stuff!



Things are really going to heat up with this experiment.

In this experiment, you will be investigating a chemical reaction. Will it be a reaction in which heat is given off or absorbed? Keep reading to find out!

Materials

small bowl or cup

cooking/candy thermometer (one to use in liquids)

plastic spoon

one package of yeast

hydrogen peroxide

measuring spoon

measuring cup

notebook or sheet of paper

pencil

Procedure

1. Read the temperature on the thermometer and write this down in your notebook.
2. Measure 50 mL of hydrogen peroxide and pour into the bowl.
3. Place the thermometer in the hydrogen peroxide and record the temperature in your notebook. Leave the thermometer in the bowl.
4. Measure 10 mL of yeast and pour into the hydrogen peroxide. Mix well.
5. Observe the temperature of the mixture. Record this in your notebook.

What is going on?

The temperature of the mixture should have gone up, as shown on the thermometer. If you put your hands on the outside of the bowl, you might have also been able to feel it warm up. It is also important to carefully observe your experiment, as you should have seen steam rising up and off of the solution in the bowl. When heat is produced in a chemical reaction, we say that the experiment produced an exothermic reaction.

Too Cool!

How cold is it going to get?

Have you ever wondered why athletes often use Epson Salts to soak their sprained ankles in? Read on to find out!

Materials

Epson Salts (available at a drug store)

room temperature water

measuring cup

measuring spoon

cooking/candy thermometer (one to use in liquids)

cup or a bowl

plastic spoon

pencil

notebook

Procedure

1. Measure 50 mL of water into the bowl.
2. Place the thermometer in the water and record the temperature in your notebook. Leave the thermometer in the bowl.
3. Measure 10 mL of Epsom salts and pour into the water. Mix well.
4. Observe the temperature of the mixture. Record this in your notebook.
5. Hold your hands on the outside of the bowl. What do you feel?

Explanation

The thermometer should have shown a drop in temperature. When you touched the outside of the bowl with your hands, it should have been colder. This experiment produced an endothermic reaction, or a reaction that uses up heat. When all of the heat is used up, it feels cold.

Athletes use Epsom Salts when they have an injury or sprain as it draws the heat out of the muscles and soothes it with the cold.

For all of your science questions or needs, contact
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w: http://www.telusplanet.net/public/mhpraxis

Alberta Science Literacy Association