

AUBURN UNIVERSITY
COLLEGE OF SCIENCES
AND MATHEMATICS

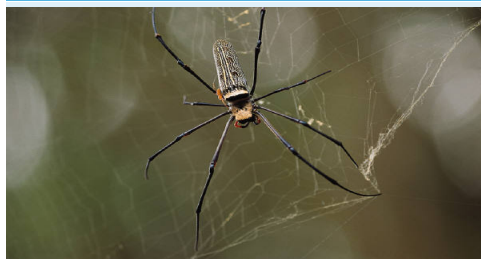
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Engaging More Community
Connections



Volume 4: Issue 1

January/February 2012



Upcoming Events & Programs:

GUTS- Getting Under the Surface

Spring GUTS Registration is NOW OPEN! Below you will find a listing of all courses.

Thursday, January 26th

- 1st-3rd – Making Music*
- 4th-6th – Magic vs. Engineering*

Monday, February 13th

- 1st-3rd – Potato Picasso*
- 4th-6th – Your Healthy Heart*

Thursday, March 20th

- 1st-3rd – Spring Fling
- 4th-6th – Along Came a Spider*

Wednesday, April 11th

- 1st-3rd - Butterflies in My Window*
- 4th-6th – Cheesy Chocolate Chemistry

* Indicates new course

GUTS is a monthly evening program for 1st-6th grade students and their parents or grandparents. Each evening session includes dessert followed by a 90-minute science activity featuring a "Getting Under the Surface" theme designed to demystify the science of topics ranging from DNA to creatures in the deep sea to how batteries work. The mission of GUTS is to enhance science literacy and engagement within our community by providing relevant science activities to students and their parents. To register for Spring GUTS Course...

Download the registration form at:
www.auburn.edu/cosam/outreach

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Upcoming Events and Programs (cont'd.)

Spring YES Registration Open! Saturday, March 3rd

Spring Youth Experiences in Science (Y.E.S.) is a Saturday science camp offered free to students in grades 3-5. Students will have the opportunity to experience science with hands-on activities in two mini-courses.

Spring Y.E.S. will be on Saturday, March 3rd from 9:00am to 12:00pm, with check-in beginning at 8:30am. To register for the camp, participants must submit a registration form to the COSAM

Outreach office before February 10th.

During the week of February 20th, participants will be notified of acceptance and will receive specific information on the courses offered.

Registration forms can be downloaded at:
www.auburn.edu/cosam/outreach

For more information on Spring Y.E.S., please contact Chelsea Harrison at 334-844-7449 or email at cdh0012@tigermail.auburn.edu

Registration Now Open for Science and Engineering Fair (6-12th grades)

Schools are invited to attend the 2012 Greater East Alabama Regional Science and Engineering Fair (GEARSEF). The fair will be held on the main campus of Auburn University on Wednesday, March 7th. The fair serves as a regional affiliate for the Intel International Science and Engineering Fair. One high school winner will move on to the international competition in Pittsburgh, Pennsylvania this May.

To register visit our website at www.auburn.edu/cosam/outreach. School registration is open until Tuesday, January 31st.

Questions should be directed to Erin Percival at 334-844-7449 or by e-mail at erin.percival@auburn.edu.

Middle School Science Olympiad

Saturday, February 25th
2012 Participating Schools

Auburn Junior High School
Auburn, AL

Baldwin Arts and Academies Magnet School
Montgomery, AL

Beverlye Magnet School
Dothan, AL

Carver Magnet School
Dothan, AL

The Corner School
Warrior, AL

Fultondale High School
Birmingham, AL

Geneva Middle School
Geneva, AL

J.F. Drake Middle School
Auburn, AL

Montgomery Catholic Preparatory School
Montgomery, AL

St. James Middle School
Montgomery, AL

The Altamont School
Birmingham, AL



Outreach Calendar

January

- 13 Science Investigations
- 16 Science Fair Teacher Workshop
- 20 Science Investigations
- 21 AP Study Day-Math
- 26 GUTS

February

- 4 AMP'd Challenge
- 4 AP Study Day-Science
- 10 Science Investigations
- 13 GUTS
- 17 Science Investigations
- 24 TEAMS
- 25 Middle School Science Olympiad

DAMES is Undergoing Reconstruction

As a result of the restructuring of this program it will not occur this spring.





Activity of the Issue

Paper Chromatography

Materials:

- scissors
- white paper coffee filter
- black marker (not permanent)
- water
- coffee cup or mug

What to do:

1. Cut a circle out of the coffee filter. (It doesn't have to be a perfect circle, just a round shape that's about as big as your spread-out hand.)
2. With the black marker, draw a line across the circle, about 1 inch up from the bottom.
3. Put some water in the cup-enough to cover the bottom. Curl the paper circle so it fits inside the cup. Make sure the bottom of the circle is in the water.
4. Watch as the water flows up the paper. When it touches the black line, you'll start to see some different colors.

5. Leave the paper in the water until the colors go all the way to the top edge. How many colors can you see?
6. If you have another black marker, draw a line on a clean, dry coffee filter circle. Put the circle in some fresh water. Does this marker make different colors than the first one?

What's Happening

Most nonpermanent markers use inks that are made of colored pigments and water. On a coffee filter, the water in the ink carries the pigment onto the paper. When the ink dries, the pigment remains on the paper.

When you dip the paper in water, the dried pigments dissolve. As the water travels up the paper, it carries the pigments along with it. Different-colored pigments are carried along at different rates; some travel farther and faster than others. How fast each pigment travels depends on the size of the pigment molecule and on how strongly the pigment is attracted to the paper. Since the water carries the different pigments at different rates, the black ink separates to reveal the colors that were mixed to make it.

For More Information about this activity or additional home science activities visit:

www.exploratorium.edu/science_explorer

Since the last issue

BEST (Boosting Engineering, Science, & Technology) is a non-profit, volunteer-based organization whose mission is to inspire students to pursue careers in engineering, science, technology, and math through participation in a sports-like science- and engineering-based robotics competition.

In September and October, 847 teams at 47 hubs across the country participated in the event. Winning teams from these hubs advanced to compete in one of three regional competitions. South's BEST, at Auburn University is one of these regions. The 2011 South's BEST competition occurred over two days in December at the Auburn Arena.

South's BEST Results

BEST Award Winners

- 1st Place- W.P. Davidson High School (Mobile, AL)
- 2nd Place- Central Magnet School (Murfreesboro, TN)
- 3rd Place- Decatur Austin Robotics Coalition (Decatur, AL)

Robotics Award Winners

- 1st Place- Central Magnet School (Murfreesboro, TN)
- 2nd Place- Decatur Austin Robotics Coalition (Decatur, AL)
- 3rd Place- W.P. Davidson High School (Mobile, AL)



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