

AUBURN UNIVERSITY
COLLEGE OF SCIENCES
AND MATHEMATICS

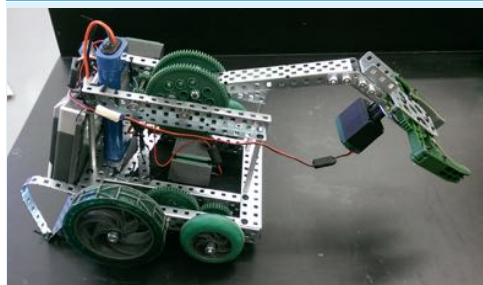
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*Engaging More
Community Connections*



Volume 7: Issue 2

March/April 2015



Upcoming Events & Programs: Science Matters 2015

Science Matters is a summer enrichment program for elementary students in rising grades 1-8 offering youngsters a supercharged science experience. The program allows participants to explore the world of science through real experiments, technology and art projects, and hands-on, make-n-take activities. During this action-packed program, kids can design and build, dabble in the art of chemistry, become a flight specialist, see amazing critters, and more! Camps are 8am-4pm. Prices range from \$180 - \$230 per week/child. Multiple week discounts are available. Courses fill on a first-come-first-serve basis, so be sure to register today!

Available Courses (as of publication date)

June 1-6	Catch Phrase (5/6 th)
June 15-19	The Phenomenon of Fish and Ferns (7/8 th)
June 22-26	Off the Grid (5/6 th)
July 6-10	Balloon Poppers (5/6 th)
July 13-17	Totally Cellular (5/6 th) Snakes and Lizards and Insects, Oh My! (7/8 th)

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AU Explore

May 1, 2015

AU Explore is a science and math invitational sponsored by the College of Sciences and Mathematics at Auburn University. Each spring over 1,000 students in grades 5 – 8 from across Alabama are invited to experience raptors, snakes, and other live animals up close, participate in mini-workshops at the "Make-n-Take Science Fun Shop", visit with Auburn faculty and students at the Science and Math EXPOs, and much more!

The highlights of this year's program include the following shows:

- AU Museum of Natural History Science EXPO
- The Loud and Crazy Show
- Glow Show
- Big Bang (Chemistry)
- Over 15 fun shop choices

Due to the high demand of AU Explore, registration was limited and is now closed for the year. Be sure to look out next spring for AU Explore 2016!

To request information or to request placement on the waitlist for the event, please contact Kristen Bond at kristen.bond@auburn.edu or by phone at 334-844-5769.

Upcoming Events and Programs (Cont'd.)





2015 Core Teacher Training

Registration Now Open

Each summer, Auburn University offers core training for PLTW Engineering, Biomedical Science, Gateway, and Launch programs to train teachers how to effectively use PLTW curricula with their students. According to the PLTW network agreement, only trained PLTW teachers may teach the curriculum.

Core training provides teachers with the knowledge to utilize the PLTW technology, software and associated curriculum. Classes are taught by master teachers and affiliate professors who bring hands-on teaching experience to the classroom. PLTW pays significant attention to assessing the teachers' readiness for the intensive two-week training. Registration for the core summer training opened on March 15 on the PLTW website at <http://www.pltw.org/core-training-course-offerings>. Classes (and class sizes) are limited, so register early!

2015 Core Training Opportunities at Auburn University

- June 1 - June 12: Introduction to Engineering Design (IED)
- June 1 - June 12: Principles of Engineering (POE)
- June 1 - June 5: Design and Modeling (DM)
- June 8 - June 12: Automation and Robotics (AR)
- June 15 - June 26: Principles of Biomedical Sciences (PBS)
- June 15 - June 26: Human Body Systems (HBS)
- June 15 - June 26: Computer Integrated Manufacturing (CIM)
- June 15 - June 19: Green Architecture/Energy & Environment (GA & EE)
- June 22 - June 26: Medical Detectives (MD)

For further information visit us at

<http://www.pltw.org/core-training-course-offerings>

For more information or to join the Alabama PLTW email list, contact:

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Outreach Calendar

April

11 TASSAL Training- Huntsville

16 G.U.T.S.

May

1 AU Explore

7 SWSM Annual Leadership Symposium

31 SSI and PLTW start date



Activity of the Issue

Make a Battery

Materials:

- 1/3 cup Lemon Juice
- 9 pieces of paper towel, each 1" x 1" in size
- 5 shiny, clean pennies
- 5 zinc-coated washers (3/4" in diameter)

What to do:

1. Cut paper towel into 1"x1" squares and soak 9 pieces in the lemon juice. Make sure no part of the towel is dry.
2. With a washer on a clean surface, place paper towel square on the top of the washer followed by a penny. Continue alternating until all materials are used.
3. Wet thumb and middle finger with either lemon juice or water. Pick up stack with those two fingers making sure to touch the metal and not the paper towel.
4. A slight tingle should be felt in the fingers.

What's Happening?

The basic parts of a battery consist of two metals surrounded by strong acid. In order for the charge to be felt, one metal needed to have a negative charge and the other needed a positive charge. With the fingers on either end of the coin stack, the circuit (the ability for the charge to circulate) was completed.

Extension

You could measure the charge by using a voltmeter (battery tester). Measurements are taken by attaching prongs to each end of the stack. Try changing up the source of acid by switching out lemon juice with another acidic source (do limes work just as well?)

This activity is from www.education.com. For more activities visit:

<http://www.education.com/activity/science/>



Since the last issue:

Getting Under the Surface (GUTS)

April 16, 2015; Pictured

GUTS is an evening program for 1st-6th grade students and their parents or grandparents offered 2-3 times during the spring semester. The mission of GUTS is to enhance science literacy and engagement within our community by providing relevant science activities to students and their parents.

Courses at the April event included **The 3 Second Rule: The true, but gross scientific facts** (Grades 1 - 3) and **The Dynamic Digestive System** (Grades 4 - 6).



Greater East Alabama Regional Science and Engineering Fair

It's never too early to plan for next year!

GEARSEF is a regional affiliate fair of the Intel International Science and Engineering Fair (Intel ISEF), the world's largest international pre-college science competition. GEARSEF is open to all students in grades 6-12 who have advanced from their local science fair (school, county, district, or community fair) and reside within multiple Alabama counties. Students can be enrolled in public or private schools in the region or affiliated with a home school cover school.

The Auburn University fair was held on March 19, 2015.

Best of Fair Winners 2015

1st Place – Venkata Macha, LAMP High School
2nd Place – Rahul Lall, Auburn High School

These two students receive an all-expense paid trip to Pittsburg to compete in the Intel International Science and Engineering Fair in May 2015.



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